DOCUMENT RESUME

ED 069 829 UD 013 048

TITLE	Progress of Public Education in the United States of America, 1969-70. A Report.
INSTITUTION	Office of Education (DHEW), Washington, D.C.
SPONS AGENCY	International Bureau of Education, Geneva (Switzerland).
PUB DATE	71
NOTE	60p.; Report of the Thirty-third International Conference on Public Education sponsored by UNESCO International Bureau of Education
AVAILABLE FROM	Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 ($0.60)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Compensatory Education Programs; Disadvantaged Youth; Economically Disadvantaged; Educational Administration; Educational Change; Educational Facilities; Educationally Disadvantaged; Educational Needs; *Educational Policy; Educational Programs; Federal Aid; *Federal Programs; *Public Education; Socially Disadvantaged; *Statistical Surveys

ABSTRACT

This report is the latest in a series prepared for the International Conference on Public Education that has been held since 1934 in Geneva, Switzerland, under the auspices of the International Bureau of Education, which is now a part of UNESCO. In Part I the focus is on the special educational needs of and Federal programs of assistance to children in the United States who are disadvantaged by social, economic, or educational conditions in their homes and communities and whose subsequent growth and development would be severely handicapped without appropriate remedial or compensatory programs. This material has been adapted from the annual report made by U.S. Commissioner of Education, S. P. Marland, Jr., to the Congress in March, 1971. Part II is a brief background summary of the organization and structure of education in the United States. Part III contains statistics on American education compiled by the Office of Education National Center for Educational Statistics. The material covers the 1969-70 school year, the most recent full year for which figures were available at the time this report went to press. The tables also contain data from earlier years to indicate trends or comparisons. [Parts of page 17 of this document are not clearly legible.] (Author/JM)

ED 069829

OE 10005-70-A

PROGRESS OF PUBLIC EDUCATION IN THE UNITED STATES OF AMERICA 1969—70

Report for the Thirty-Third International Conference on Public Education,
Sponsored by the United Nations Educational, Scientific and Cultural Organization
International Bureau of Education

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Elliot L. Richardson, *Secretary*

Office of Education
S. P. Marland, Jr., *Commissioner*

Institute of International Studies
Robert Leestma, *Associate Commissioner for International Education*

UD 013048

Superintendent of Documents Catalog No. HE 5.210:10005–70–A
U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON: 1971

For sale by the Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402
Price 60 cents

Stock Number 1780-0817

Foreword

This report is the latest in a series prepared for the International Conference on Public Education that has been held in Geneva, Switzerland since 1934 under the auspices of the International Bureau of Education (IBE), now a part of UNESCO.

In Part I the focus is on the special educational needs of and Federal programs of assistance to children in the United States who are disadvantaged by social, economic, or educational conditions in their homes and communities and whose subsequent growth and development would be severely handicapped without appropriate remedial or compensatory programs. This material has been adapted from the annual report made by U.S. Commissioner of Education S. P. Marland, Jr. to the Congress in March, 1971. The Office of Education's emphasis on achieving equality of educational opportunity for disadvantaged children is one of the major priorities in the broader effort to help make education increasingly responsive to the needs of *all* children.

Part II is a brief background summary of the organization and structure of education in the United States.

Part III contains statistics on American education compiled by the Office of Education National Center for Educational Statistics. The material covers the 1969–70 school year, the most recent full year for which figures were available at the time this report went to press. The tables also contain data from earlier years to indicate trends or comparisons.

This report is made available in English, French, Spanish, and Russian editions. The various language versions are useful not only to the representatives of the 126 Member States of UNESCO who may attend the IBE conference in Geneva, but also for the many visitors from abroad who seek information from the Office of Education annually. The various language versions have also proven of value to many of the non-English speaking educators and policymakers in other countries who are interested in educational development in the United States.

ROBERT LEESTMA

Associate Commissioner
for International Education

Contents

PART I. Annual Report 1

I. The State of Education 1

Decade of Discontent 1
Why We Are Educating 2
Education Research 3
Need for Humaneness 4
The Federal Role 4

II. National Goals and Priorities 6

III. Aid to the Disadvantaged 7

Program Coordination 7
Education Aid to the Indians 9
Career Education 10
Financial Aid for College Students 11

IV. Educational Administration 13

New Role of Evaluation 13
Management by Objectives 13
National Assessment 14
Coding and Terminology 14
Accountability 15
School Finance 16

V. Studies Related to Individual Needs 17

Research Concerning Children 17
Schools in Poverty Areas 17
Community Partnerships 18
New Teachers 19
Models for Teacher Training 20
New Curriculum Developments 21
Drug Abuse Education 22
Campus Unrest 22

24 **VI. Federal-State Partnership**

24 Expanding Regionalization
24 An Evaluation Partnership
25 State Management Reviews
25 Improving Local Research
26 Cooperation in a National Objective
Education of the Handicapped
27 Areas of Federal Impact

28 **VII. The Unfinished Agenda**

28 Higher Education Foundation
28 Aid to Colleges Serving Black Students
29 New Data for Education
29 Desegration and Emergency School Assistance
29 Advisory Councils

33 **PART II. Organization and Structure of Education**

33 Organization
35 Structure

39 **PART III. General Statistics on Education**

39 Enrollment
39 Instructional Staff
39 Graduates
45 School Retention Rates and Educational Attainment
45 Income
45 Expenditures
53 International Education

Tables

		Page
1.	Enrollment in educational institutions, by grade level and by type of school: United States, fall 1968 and fall 1969	40
2.	Percent of the population 5 to 34 years old enrolled in school, by age: United States, selected years, October 1947 to October 1969	40
3.	Enrollment in grades 9–12 of public and nonpublic schools compared with population 14–17 years of age: United States, selected years, 1889–90 to fall 1969	41
4.	Number of classroom teachers in elementary and secondary schools, and instructional staff members in higher education institutions: United States, fall 1968 and fall 1969	44
5.	Comparative statistics on enrollment, teachers, and schoolhousing in full-time public elementary and secondary schools: United States, fall 1964 and fall 1969	44
6.	Number of high school graduates compared with population 17 years of age: United States, selected years, 1869–70 to 1968–69	46
7.	Earned degrees conferred by higher education institutions: United States, selected years, 1869–70 to 1969–70	46
8.	Earned degrees conferred by higher education institutions, by area of study and by level: United States, 1968–69	47
9.	Estimated retention rates, 5th grade through college entrance, in public and nonpublic schools: United States, selected years, 1924–32 to 1961–69	47
10.	Level of school completed by persons 25 years old and over, and 25 to 29 years old: United States, selected years, 1940 to 1970	48
11.	Percent of illiteracy in the population: United States, 1900 to 1960	48
12.	Revenue receipts for public elementary and secondary schools, by source: United States, selected years, 1919–20 to 1969–70	50
13.	Federal funds for education and related programs: Estimated outlays for fiscal years 1969 and 1970	50
14.	Total and per-pupil expenditures for public elementary and secondary education: United States, 1919–20 to 1969–70	52
15.	Gross national product related to total expenditures for education: United States, selected years, 1929–30 to 1969–70	52
16.	Number and amount of Federal awards and programs in foreign languages and world affairs: United States, 1969–70	54
17.	Number of participants in international education programs administered by the U.S. Office of Education: 1959–60, 1964–65, and 1969–70	54

Figures

		Page
1.	The structure of education in the United States	38
2.	Percent of the school-age population enrolled in school: United States, October 1950 to 1970	42
3.	Number of pupils per teachers in public elementary and secondary schools: United States, fall 1960 to 1970	43
4.	Estimated retention rates, 5th grade through college graduation: United States, 1961 to 1973	49
5.	Estimated expenditures of educational institutions, by source of funds: United States, 1969–70	51

PART I. Annual Report

I. The State of Education

The long swell of history appears at this moment to have lifted us above the turbulence of recent years and positioned us to appraise with some reasonableness the present condition of the educational enterprise. It is a commanding view, a prospect at once gladdening and disturbing.

We can take satisfaction from tremendous progress. The sheer size of the American commitment to education is amazing, with more than 62 million Americans—more than 30 percent of the population—actively engaged as students, teachers, or administrators. More than three million young men and women will graduate from high schools throughout the country in June 1971, as contrasted with fewer than two million 10 years ago. Nearly 8.5 million students are enrolled in higher education as contrasted with slightly more than four million 10 years ago. Size apart, our educational enterprise is also far more nearly equalized, with academic opportunity extended for the first time in our history to large numbers of black, brown, and Spanish-speaking people. Total black enrollment in colleges and universities, for example, has more than doubled since the mid-60's to nearly 500,000 today, though much remains to be done for the advancement of our minority young people before we can rest.

We can be proud of the willingness and rapidity with which the educational profession has begun to move to meet the extensive and unprecedented demands being made upon it. Ten or 20 years ago education was almost wholly limited to academic matters carried on within the conventional confines of the classroom and the curriculum. Today educators are dealing with the whole range of human concerns—academic, economic, social, physical, emotional—and education has burst out of the classroom through such efforts as *Sesame Street*, a television series of succinct lessons for preschoolers in an attractive and exciting television format.

We know that ours is a great education system. But it falls short of our aspirations. We must improve it.

Decade of Discontent

American education has undergone over the past 10 years probably the most wrenching shakeup in its history. Education has been charged with inefficiency, unresponsiveness, and aloofness from the great issues of our society, perhaps even lack of interest in these issues. These charges, in some instances, have undoubtedly been warranted. But in most cases the schools and those who lead them and those who teach in them are deeply, painfully, and inescapably concerned with the great social issues of our time and the part that the schools must play in resolving them.

The depth of the schools' contemporary involvement becomes strikingly apparent when it is compared with the false serenity of education as recently as 15 years ago, when it was in the very absence of stridency and criticism that our real problems lay. Public discontent with the education of 1970 was bred in the synthetic calm of the 1950's and before.

This movement from serenity to discontent, from complacent inadequacy to the desire for vigorous reform, has not been accomplished easily. Some reform efforts, conceived in an atmosphere of hysteria, have failed while others have succeeded splendidly. But after many stops and starts, false expectations and disheartening letdowns, we have arrived at a time and place in which educational reform at all levels is now the intent of all responsible educators. As a consequence, truly equal educational opportunity for all young Americans is now a feasible goal.

We are going through a period of intensive concern with the poor and the disadvantaged. Since 1965, under one program alone of the Elementary and Secondary Education Act (ESEA), the Federal Government has invested more than $7 billion in the education of children from areas with high concentrations of low-income families. A number of States have made significant companion efforts. Admittedly, our success thus far in increasing the academic achievement of the disadvantaged child has been marginal. But prospects for future success are increasing because the educational profession itself, at first prodded into this work by such outside forces as the drive for civil rights, is now substantially dedicated to the redress of educational inequality wherever it may be found. This is a dramatic turnaround from the early and mid-1960's, when we tolerated the fact that certain of our citizens were not profiting to any measurable extent from the schools' conventional offerings and when we were content to permit these citizens to become the responsibility of unemployment offices, unskilled labor pools, and prisons. That time has passed, and we now accept the proposition that when human beings in our charge fall short of their capacities to grow to useful adulthood, *we*, the educators, fail.

Rough events of the past decade, then, have brought the educators of this Nation to the beginning of an appreciation of just what thoroughgoing educational reform really means. A giant institution comprising 60 million students, 2.5 million teachers, and thousands of administrative leaders cannot remake itself simply because it is asked or even told to do so. Tradition has enormous inertia, and wrong practice can be as deeply rooted as effective practice. The past decade, in sum, has been a time of trial and error, a time in which we have plowed and harrowed our fields. Now we must plant deeply to produce the strong roots of a new American education.

Why We Are Educating

As we look to 1972 and beyond, we are able to state with far greater clarity the reasons why we are educating our citizens than we could 10 or 20 years ago. We are educating a total population of young people in the elementary and secondary schools, and we are no longer satisfied that 30, 40, or 50 percent of it should not really expect to complete high school. And if we are educating for the fulfillment of all the people of our land, we certainly cannot halt at the secondary level, or even the level of higher education, but

8

must look to the arrangements for continuing adult education over the years. Increasingly, we are persuaded as a Nation that education is not reserved for youth but is properly a lifelong concern. In the past half-dozen years, for example, more than two million adult Americans have been given the opportunity to obtain an 8th-grade education under the Office of Education adult education program. Many millions more have continued to grow professionally, culturally, and intellectually, as adults, through formal and informal institutions of education.

We must be concerned with the provision of exciting and rewarding and meaningful experiences for children, both in and out of the formal environment of classrooms. When we use the word "meaningful," we imply a strong obligation that our young people complete the first 12 grades in such a fashion that they are ready either to enter into some form of higher education or to proceed immediately into satisfying and appropriate employment. Further, we now hold that the option should be open to most young people to *choose* either route.

We must eliminate anything in our curriculum that is unresponsive to either of these goals, particularly the high school anachronism called "the general curriculum," a false compromise between college preparatory curriculum and realistic career development. When young people are disenchanted with school—and more than 700,000 drop out every year—it is frequently because they cannot see any useful, necessary, rewarding future that can be insured by continued attendance in class. The reform to which we must address ourselves begins with the assurance of meaningful learning and growth for *all* young people, particularly at the junior high and high school levels. Students frequently ask us why they should learn this or that. We who schedule these courses and we who teach them should ask ourselves the same questions and have the wisdom and skill and sensitivity to produce good answers.

Courses of instruction, books, materials, and the educational environment—all should relate to the student's needs, answering some requirement of his present or future growth, irrespective of custom or tradition. We as teachers in today's educational setting cannot win the response of our young people by perpetuating formalized irrelevance in classrooms. Seemingly irrelevant expectations must be made relevant by the teacher.

Education Research

We are obliged not simply to provide education but to provide very good education. The success of our efforts to find ways to teach more effectively will depend upon the quality and application of our educational research, a pursuit that has absorbed more than $700 million in Office of Education funds over the past decade and will take an increasing share of our budget. We need to know how we can develop the child of deep poverty, the minority child, the child who has been held in economic or ethnic isolation for generations, the child without aspirations in his family or in his environment, the child who comes to school hungry and leaves hun-

grier. We must discover how to develop the five million American children who bring different languages and different cultures to their schools. They need special help. Nor can we ignore the gifted child, possessed of talents that we know frequently transcend the ability of his teacher.

If we would find the answers to these questions, let us set aside the traditional boundaries of learning, the days, the hours, the bells, the schedules. Let us find ways to free ourselves from administrative strangleholds on what teaching should be and what teachers should be. Research must open wide the windows of learning, and teachers must listen carefully to the counsel of the researchers.

Let us find ways to keep more schools open 12 to 15 hours a day and 12 months a year to make sensible constructive use of our multibillion-dollar investment in facilities and personnel. Let us construct a school environment sufficiently systematic to be responsive to young people, yet informal enough to enable youngsters to come and go in a spirit of freedom and honest interest, rising above their present circumstances and reaching joyfully for all that the schools can give them.

Need for Humaneness

Above all, let our schools be humane. With the possible exception of those who tend to the ill, teaching is the first of the humane professions, and it seems especially appropriate at this time to honor that tradition.

Teachers want to bring excitement to the classroom. They want to bring fulfillment to the lives of the children in their charge. But to achieve excitement and fulfillment in the classroom, teachers need a new freedom from administrative protocol and an increased competence in reaching each learner and touching his life deeply and compassionately.

The Elementary and Secondary Education Act has enabled us to learn sound lessons in creative teaching techniques. Now we find it necessary to set aside the mechanics of testing and the excessive formalities of school organization, and to put these new techniques to work in all the classrooms of America.

Let us find ways for teachers to concern themselves wholly with students. We must use our technology and the other resources of this half of the 20th century—resources that we have barely touched—to multiply the effectiveness of the teacher, greatly to increase the teacher's efficiency and productivity.

The Federal Role

The Federal role in education becomes one of increasing the effectiveness of the human and financial resources of our schools, colleges, and universities. The present level of Federal assistance to our public schools is something less than 7 percent of our total investment. The Federal share may rise eventually to three or four times that level. But first the Federal Government must spon-

sor or conduct research into the learning process and deliver the results of that research convincingly and supportively to the educational institutions. We are constructing a nationwide educational communications network to disseminate proven new practices in order to move the art of education from its present condition to one of the increased quality that we demand of ourselves. We must proceed more swiftly to implement the products of research without stopping to redefine every goal and every process at every crossroad in the country.

The Federal role calls for greatly increased technical assistance to States and local school systems to insure the delivery of new and better ways to teach and learn. As conductor and purveyor of educational research, the U.S. Office of Education (OE) seeks to serve the 50 States, the District of Columbia, and the outlying areas.

II. National Goals and Priorities

Throughout the decade preceding the fiscal year 1970 (FY 70), education was absorbing major new responsibilities placed upon it by Federal and State legislatures.

One way to gauge the scope of these new responsibilities is to observe the growth of educational expenditures during the decade. In FY 60, total expenditures on education—kindergarten through college—were $24.7 billion, just a shade over 5 percent of the Gross National Product (GNP) for calendar 1959 ($483.7 billion). In FY 70 these expenditures were about $70.6 billion, or 7.6 percent of a greatly increased GNP ($931.4 billion in calendar 1969).

The overall Federal contribution increased more than four-fold in the decade.[1] Within the Office of Education the increase was eight-fold, from the FY 60 budget of $500 million to the FY 70 budget of $4 billion. Clearly the American people wished to invest more heavily in education and training.

In 1969 and 1970, while deeply concerned with the problems of education, the U.S. Department of Health, Education, and Welfare (HEW)—of which the Office of Education is a constituent agency—was also dealing with different and newer issues affecting all citizens—among them preservation of the environment, "consumerism" in the marketplace, increasing costs of medical care for the aged, and malnutrition and other diseases of hunger in our "affluent society."

President Nixon had announced his Administration would bend every effort to "find a solution for the welfare problem." This was significant for education, because Federal educational aid to disadvantaged youngsters is to a great extent assistance to children of families on welfare. Nearly one-fourth (2.3 million) of the pupils in projects supported by the Elementary and Secondary Education Act also benefit under Aid to Families with Dependent Children.

Early in 1969, the agencies in HEW were asked to review their responsibilities, and in March 1970 the following commitments were stated as their goals and objectives for education:

- Greater responsiveness to the needs of the disadvantaged, the handicapped, the isolated, those in poverty—the "priority populations" for Federal concern and aid
- A reformed, invigorated system of management for the entire educational enterprise of all levels of government, beginning with the Office of Education itself
- Development and early application of new research directly related to current problems and future directions of educational instruction and administration
- Restructuring and reorganization of administrative practices to strengthen HEW regional offices and bring into closer partnership the Federal and State agencies in education.

[1] Estimated FY 71 figures show a five-fold increase over FY 60.

III. Aid to the Disadvantaged

While there was a change in the political leadership in the Executive Branch in 1969, there was no change in the Government's goal to provide strong, continuous, and improved support to education and training programs for the Americans who need such programs the most:

- The economically deprived
- The racially and geographically isolated
- The untrained and the unskilled
- The handicapped and the neglected.

A wide variety of means was employed in FY 70 in a drive to achieve this goal. Heavy reliance was placed on the Elementary and Secondary Education Act. Several early childhood programs were coordinated through a new Office of Child Development in HEW. The Right to Read Program was instituted, and new, long overdue attention was paid the education of American Indians. New viewpoints were adopted in vocational education and in financial aid programs for college students.

Program Coordination

Early in FY 70 the Government began an extensive review of all its education programs serving the disadvantaged. The next step was clear enough. Where appropriate and feasible, certain of these programs would be coordinated for efficiency, economy, and the expression of the Government's unity of purpose.

Project Trend.—In May 1970 the Commissioner of Education established Project TREND (Targeting Resources on the Educational Needs of the Disadvantaged).

This is a child-centered effort, planned for launching in FY 71. The project assumes that primary responsibility for planning and carrying out a comprehensive program serving low-income and educationally deprived children will be exercised by the local education agencies in conjunction with State education agencies.

Head Start.—HEW established its Office of Child Development (OCD) in July 1969 to bring the core of the 57-year-old Children's Bureau, which has a mandate to investigate and report on all matters affecting the welfare of children, together with Head Start.

Head Start, begun by the Office of Economic Opportunity (OEO) and transferred to HEW in 1969, has been an attempt "to broaden the arc of a child's achievement," as President Nixon has phrased it. Funding of the program grew from $95 million in FY 65 under OEO to $326 million in FY 70 under HEW, serving a half-million preschoolers in summer and full-year programs in schools, community agencies, and 29 Parent and Child Centers.

In addition to coordinating these and other activities at the Federal level, OCD directs the Community Coordinated Child Care (4–C) program. State and local 4–C groups, composed of operators of private and public child care programs and citizens representing consumer interests, have been formed with the assistance of OCD's 4–C staff and Federal Regional Committees on Child Care. Their mission is to survey needs for services and develop plans whereby various private

and public resources may be brought together to meet the needs of children.

The 4–C staff within OCD works in a concentrated way among preschoolers as Project TREND is to function among all age-grade levels in poverty areas.

By mid-FY 70, HEW had brought together in OCD the largest of 61 programs solving the needs of America's 18 million children under the age of 5.

Follow Through.—In kindergarten and the early primary grades, additional support is provided certain disadvantaged youngsters to reinforce the gains made in Head Start and similar preschool programs.

The Follow Through program in FY 70 helped an estimated 36,000 children in 144 communities. Besides academic help, Follow Through youngsters also received important health and food services.

The Right To Read.—Early in the process of aiding the disadvantaged student, it became widely recognized that reading is a key factor in the individual's ability to realize his own potential and compete, if he so chooses, in the job marketplace. But the reading record was not good.

In 1969 one-fifth of all students from low-income families were reading below grade level, unable to grapple with printed instructions, information, or ideas. In September 1969 Dr. James E. Allen, Jr., then the Commissioner of Education, said: "We should immediately set for ourselves the goal of assuring that by the end of the 1970's . . . no one shall be leaving our schools without the skill and the desire necessary to read to the full limits of his capability."

A Right to Read Office was established in the Office of Education, its prime responsibility to pull together the energies expended in more than 60 OE programs supporting several hundred separate research, demonstration, and learning projects in the reading field in schools and colleges.

Concurrently, plans were going forward to establish a National Reading Council.[2] To be composed of a cross section of society, the Council was envisioned as providing the partnership structure through which the skills and resources of the communications media, business, labor, and the general public would be mobilized and join with the educational community and government at all levels in a concentrated attack on the reading problem.

Also in the spring of 1970, a "Targeted Research and Development Program on Reading" was begun in OE. By midyear too, some 20 States had put together their own plans to do something effective about the reading problem in their own schools.

Generally, the Regional Educational Laboratories are proving their value as they match the reading problem with their own research clientele. The Center for Urban Education in New York (inner-city children), the Northwest Regional Educational Laboratory (Indian and Eskimo children), the Southwest Education Development Laboratory (Mexican-American and black chil-

[2] A director was named for the Right to Read Office on July 1, 1970, and President Nixon announced formation of the Council on July 31.

dren), and the Washington University Preschool Laboratory (children with behavioral problems) are among those which began work on the reading problem in FY 70.

OE's National Center for Educational Communication (NCEC) launched a program to help improve reading programs in the schools. Four interpretations of current research and exemplary practice on treatment of reading difficulties were disseminated through State educational agencies. Before the end of the next fiscal year, NCEC plans to distribute to State agencies and all operating school districts descriptions of approximately 15 exemplary reading programs which have been found effective.

The importance of reading began to permeate a number of other programs with different primary objectives. During FY 70, 10 projects in dropout prevention emphasized reading, along with vocational study and community living skills.

Reading readiness and fundamental reading skills in preschool and early childhood education are stressed in the majority of bilingual and bicultural education programs, from Vineland, N.J., to Las Cruces, N.M. The $21.25 million budgeted for bilingual education in FY 70 was spread among 131 projects, with reading skill in both languages as a major objective.

Education Aid to the Indians

Bilingual education began, and has been used primarily, as a program for Spanish-speaking children, although projects among other language and nationality groups (Oriental, French, Indian) have also been funded. In FY 70, however, it became clear that the Federal charge with respect to education of American Indian children and families must be more than it had been.

When FY 70 began, the outlook for 240,000 school-age Indian children was bleak. A Senate special subcommittee had reported[3] that the school achievement level of Indian children was generally 2 to 3 years below that of white students, that the Indian dropout rate was double the national average, and that a fourth of all elementary and secondary school teachers serving Indian children acknowledged they would rather not teach Indians.

Congress made 60 recommendations to ameliorate these conditions. One of these was that the Department of Health, Eduation, and Welfare, the Department of the Interior, and the National Council of Indian Education "devise a plan of action for a united effort between the two Departments for the development of a quality education program for Indian children." Such a plan was submitted to the President at the end of FY 70.

The congressional report also urged the Office of Education to make a greater effort to bring about improvement in the public school education of Indian children. OE's Office of American Indian Affairs was reactivated and stimulated projects and proposals in numerous program areas.

---

[3] *Indian Education: A National Tragedy—A National Challenge.* U.S. Senate Special Subcommittee Indian Education, Washington, 1969.

The Office of American Indian Affairs and Interior's Bureau of Indian Affairs (BIA) cooperated in an extensive study under the program, and during FY 70 plans were drawn up to increase the effectiveness of this program.

Career Education

One of the goals of HEW, to use the full scope of our vocational education programs to make vocational education more helpful to the disadvantaged child, is consistent not only with the major thrust of aid to disadvantaged populations but also with the Vocational Education Amendments of 1968, which specified that 15 percent of Federal funds for vocational programs be set aside for the disadvantaged and 10 percent for the handicapped.

The 1968 Amendments gave rise to strong grassroots planning through a number of federally sponsored regional and professional conferences in the spring of 1969. By the beginning of FY 70 all States had submitted at least their first portion of a 5-year vocational and technical education plan reflecting the new national initiatives and interests.

Among the many vocationally related changes in FY 70, three are clearly discernible.

First, vocational and technical education opened up and became more of a cooperative, community-based enterprise than before. New State advisory councils included concerned participants from major industries, organized labor, and many agencies of government—the decisionmakers in the world of work.

Universities were increasingly involved in vocational curriculum research and school personnel training. Linkages, firmer than ever, were established between vocational education and vocational rehabilitation, special education for handicapped children and youth, State and U.S. employment services, and others with concurrent interests.

Second, a wider, more contemporary view of occupational and preemployment education was ventured in FY 70. Consumer and homemaker programs served more than a third (1.5 million) of the nearly five million high school students enrolled in vocational education programs. For the remaining three million secondary school and one million postsecondary vocational students, the choices of occupational training ranged beyond the familiar marketing and clerical areas into the new areas of community and national need —health services, public safety, environmental technology, data processing, and middle management in business and industry.

Third, in January 1970 the unemployment rate was 3.9 percent and showing signs of rising. The leadership—State and Federal—in vocational education turned to the issue of "flow" in and out of the unemployment "pool."

In the past, between 20 and 25 percent of the new members of the work force were released by the schools unprepared for employment. In a sink-or-swim situation, they tended to sink. Youth unemployment was 5.5 times the rate of adult unemployment in 1969.

In the past, too, Federal employment programs have tended to concentrate almost exclusively on aiding people after they became employed. In FY 70, vocational leaders realized that the responsibility of education is to release into the national manpower pool individuals equipped for an actual job, not merely replacements for those who have moved out of the unemployment pool into manpower training programs. In the words of the National Advisory Council on Vocational Education, "employment is an integral part of education—essential to the learning experience of many youths."

The Council added that "every secondary school should be an employment agency," as many universities are, and that "a school in which getting a job is part of the curriculum is more likely to have students who understand why reading and mathematics make a difference. . . ."

Cooperative Education.—If we had to choose an activity that best illustrates the vocational education movement discussed thus far, it would be cooperative education.

The priority target population for this specific effort is the 2.7 million disadvantaged students living in areas with high rates of school dropout and youth unemployment. In FY 70, when programs were being shaped to match the demography of deprivation, about 8 percent, or 215,000, of these youths were served. Half were inner-city residents and the rest were from rural areas, smaller cities, and some suburban areas.

In cooperative education, as the Advisory Council advocates, the participating school places the student in the job that may best complement his academic experience. Federal funds may be used to pay the costs, including his salary. A young person studying computer technology in class may also be employed under cooperative arrangements with a municipal agency using computers for planning and resource assessment. He may study medical technology in school and practice it—as an employee—in a hospital or clinic.

Cooperative education and work-study programs not only place the student in a job. They also build a strong bridge from the supportive learning environment to the adult world of work.

Financial Aid for College Students

OE has an array of programs to assist the needy student, both before and after he enters college. The programs fall into two classes: financial support and nonfinancial activities designed to encourage him to enter and stay in college.

The Financial Aid "Package."—To help all students capable of handling advanced studies to get the money to attend college, the Federal Government offers loans, grants, and work-study opportunities.

During the 1969–70 academic year, 455,000 students (about 6 percent of total college enrollment) obtained National Defense Education Act (NDEA) loans directly from their own institution's loan office. The average annual loan, for the first time in the 10-year history of this program, passed the $600 mark.

Educational Opportunity Grants (EOG's), now averaging $500 each, are directed toward qualified high school graduates of exceptional financial need. During FY 70, EOG's were given to nearly 290,000 students, close to a third of them from families with an annual income well below the poverty line of $3,600.

Work-study employment, which may be—but is not necessarily—related to career objectives, helped about 375,000 students in FY 70, with Federal money paying 80 percent of their salary. The youths worked primarily for their own college or university, although jobs in other nonprofit organizations are also permitted. An estimated 100,000 students were employed during the summer of 1969.

Nonfinancial Assistance.—Under the Talent Search program in FY 70 some 140,000 promising young people from disadvantaged backgrounds were literally searched out, given guidance and counseling service, and motivated to continue on in their studies. It is hoped that 25 percent of these will keep up. The Commissioner contracts with either nonprofit or profitmaking groups to get the Talent Search job done.

On July 1, 1969, Upward Bound was transferred from the Office of Economic Opportunity to the Office of Education. Upward Bound provides tutorial and other assistance to high school students to prepare them for college work and life. As of the opening of the fall 1969 academic term, some 23,000 Upward Bound alumni had enrolled in institutions of higher education.

A Special Services program for students already accepted by a college but facing difficulties stemming from previous economic, geographic, or other isolation went into action in FY 70. Counseling, tutorial, career guidance, and other support was provided for about 30,000 educationally disadvantaged or physically handicapped students.

Aid to the Middle-Income Student.—More than 900,000 students were aided in FY 70 by the Guaranteed Student Loan Program, half of them from families with an annual income of between $9,000 and $15,000 a year.

Under this program students borrow from banks, savings and loan associations, or other commercial lenders. The Government may pay the interest (up to 7 percent) on their behalf, but in any case it guarantees the lender against loss. In FY 70 $839.7 million in loans was guaranteed, with the average loan being $860.

IV. Educational Administration

The disparity between promise and achievement in education had widened enough by the beginning of FY 70 to cause disaffection not only among members of the public but also among government leaders themselves. President Nixon, recognizing this, said in the fall of 1969: "The legislative program of this Administration differs fundamentally from that of previous administrations . . . the watchword of this Administration: Reform."

During ensuing months educational planning, evaluation, and data gathering were accomplished in that spirit, so that by the spring of 1970 the President had enough information to deliver a message to the Congress exclusively "On Eduational Reform," in which he said:

> In this field more importantly than in any other, I have called for fundamental studies that should lead to far-reaching reforms before going ahead with major new expenditures for "more of the same."

New Role of Evaluation

The Secretary of HEW, during a colloquy with members of Congress 1 year prior to passage of the FY 70 appropriations bill, said,

> We put a very high premium on [the] evaluation process . . . simply because we really don't know what is working and what is not working. With the present inadequate, uneven information that we receive on these various programs, we cannot come back to you [Congress] with straight answers as to whether they are producing the results that are intended.

The Commissioner of Education, Dr. James E. Allen, Jr., told the staff of the Office of Education in the fall of 1969 that its first goal ought to be to "develop a nationwide strategy for maintaining a continuous process of improvement and relevance in American education." He then observed that this goal could only come about through "a systematic plan for linking the processes for change—educational research, development, demonstration, evaluation, and dissemination. . . ."

The FY 70 ledger shows an investment of $14.5 million for planning and evaluation. The FY 69 level was $1.2 million.

Management by Objectives

HEW spent much of FY 70 establishing a system of "management by objectives." Each manager was asked: "What do you hope to accomplish? What are your program objectives?" Toward the close of FY 70, the Secretary circulated a compendium of Departmental goals to guide program managers. Of the 18 "Departmental Goals for Operational Planning," 13 had direct connections to one or another of more than 100 legislated education programs; others, relating to environmental quality, consumer affairs, health delivery, and the aging, were clearly part of the educational setting.

From this effort came, for example, the Departmental goal "To develop a comprehensive and coordinated program to improve the availability of postsecondary career education programs of less than 4 years' dura-

tion." This goal was followed by a series of specific program objectives, such as the increased use of "postsecondary career-oriented institutions to train sub- and para-professionals in HEW-related program areas where there are manpower shortages." OE's cooperative education program to train students in health and medical technology was an example of specific administrative response to this.

National Assessment

In July of FY 70, the first results began appearing from one of the country's most ambitious education projects, the National Assessment of Educational Progress (NAEP) authorized by the 90th Congress.

The National Assessment was originally put together between 1964 and 1969 by the Carnegie Corporation and the Ford Foundation. These private agencies worked out the feasibility and overall plan. On July 1, 1969, The Education Commission of the States (ECS) assumed full responsibility for the Assessment. ECS members are Governors, chief State school officers, school superintendents, representatives of higher education, legislators, and lay leaders representing 43 States and outlying areas. In FY 70 the OE's National Center for Educational Research and Development provided $2.4 million in support for it.

During 1969 and 1970 the beginning of the NAEP's "First Cycle" took place. Questions (or "exercises") on science, writing, and citizenship were asked of some 90,000 Americans—25,000 aged 9; 28,000 aged 13; 28,000 aged 17; and 10, aged 26 to 35—as good a cross section of Americans—their schools and their households—as possible.

At the close of FY 70 a full national report on the science "exercises" was released, along with a partial report on the citizenship exercises. From these census-like data, the country began to get its first glimpse of its "Gross Educational Product."

Education Manpower Assessment.—Of additional help in educational planning is a series of reports on teachers, the National Assessment of Educational Manpower. A report titled *The Education Professions, 1969–70,* was published in FY 70.

Nearly 30 percent of those trained to teach do not go immediately into the classroom upon graduation, and at least 60 percent of those who do, don't teach more than 5 years. Such data as these indicate the need for new and better ways of conducting the preservice and inservice education of teachers. The results of such changes are pointed out in the report's discussion of the Teacher Corps:

> Surveys of the 1,300 interns who have graduated thus far show that they are remaining in education, and particularly in poverty-area schools, at rates well above the national averages. About 86 percent are in teaching, in education, or in social services, and more than 70 percent of those teaching are in poverty-area schools.

Coding and Terminology

To take advantage wherever possible of sophisticated data-gathering systems, OE, aided by 76 other public and private agencies and professional education organizations, de-

veloped a *Handbook of Standard Terminology for Curriculum and Instruction in Local and State School Systems.* The *Handbook's* 10-digit code for curriculum subject matter areas was approved in principle in FY 70 by the National Bureau of Standards.

A set of codes was developed also for post-secondary educational institutions. The set was accepted by the Federal Interagency Commission on Education and is now standard both within and outside the government.

Immediately useful and also broad in scope is the Consolidated Program Information Report (CPIR), developed jointly by Federal and State education officials to collect information necessary for planning, evaluation, and statistical purposes. CPIR assembles dollar and enrollment figures on major elementary, secondary, and adult basic education programs.

Accountability

To a marked extent, State and local education leaderships have accepted the challenge of "accountability"[4] and of reforming State and local ways of doing things.

[4] According to the *Handbook of Standard Terminology* referred to earlier, accountability is "the capability and the responsibility to account for the expenditure of money and the commitment of other resources in terms of the results achieved. This involves both the stewardship of money and other resources and the evaluation of achievement in relation to specified goals." Records include uses of equipment, facilities, and supplies; objectives according to the capabilities of pupils; and the degree to which a pupil develops during a predetermined period of time.

Although encouraged by ESEA to invest heavily in comprehensive educational planning and evaluation, most States found themselves unable to forego what they regarded as more urgent functions until they had available separate resources. Late in FY 70 a $5-million appropriation offered each State $96,000 to be used for comprehensive planning and evaluation. Every State submitted an application within the deadline and received its grant. Most States proposed to create new (vitalize existing) centralized planning and evaluation units. With availability of trained and qualified manpower a serious problem, virtually all States wrote in staff development plans. Virtually all States also wrote in proposals for extending their planning and evaluation staff development and for operational guidance to local education agencies. A few confessed that some of their urban districts were farther along in these directions than the State education agencies themselves.

Most common starting points: Installation of more effective management information systems, adoption of program planning and budgeting systems, and determination of objectives for management.

Nine interstate projects on State Planning and Program Consolidation, begun in 1968 and funded under the special projects of ESEA, involved all the States. The projects concentrated on management training and administrative reform, established new lines of interstate communication and data sharing, and established professional competence in State education administration as a major concern of State administrators themselves.

School Finance

The President, in his March 1970 message, said, "The continuing gap in educational expenditures between rich and poor States and rich and poor school districts is cause for national concern."

The President devoted more than a third of his message to the "fiscal course of . . . educational planning for the Seventies." On the day of that message, March 3, 1970, Mr. Nixon signed Executive Order 11513, establishing a President's Commission on School Finance. The Order defined the Commission's function as "to study, and report to the President on, future revenue needs and resources of the Nation's public and nonpublic elementary and secondary schools."

Within 2 months, on April 13, Congress enacted legislation that provided for a National Commission on School Finance. Thus, by the end of FY 70 both the President and the Congress had recognized—and had done something about—the need for getting much more and much better information on school finances while reform of the entire enterprise is under way.

V. Studies Related to Individual Needs

While an impressive start had been made by FY 70 on redressing the education imbalances within American society, it was clear that the great legislative efforts of the sixties —by themselves—were not enough. "The idea of creating a set of 'programs,' and then expecting people to fit themselves into those programs, is contrary to the American spirit," President Nixon told Congress in August 1969. "We must redirect our efforts to tailor government aid to individual need."

Redirection . . . change . . . relevance . . . those terms apply to the shift of attitude on the part of Federal education agencies in FY 70. That attitude produced a number of important highlights in the life of the student, the teacher, the school, the curriculum, and the community.

Research Concerning Children

Basic research was one OE program that was "redirected" in FY 70. It was identified as a special program with its own mission and organizational unit within OE's National Center for Educational Research and Development.

OE-supported projects cover a wide range of topics, with heavy emphasis on discovering as much as possible about the human organism from the relationship between prenatal nutrition and brain development to "selective forgetting," from comparisons of perceptual capacities between retarded and normal children to infant-mother attachments.

Three panels of non-Federal scientists reviewed proposals for basic research in cognitive, affective, and sociological areas; they approved 43 grants for an FY 70 obligation of $2 million. An additional $900,000 of OE's FY 70 money went into 16 projects recommended by the Committee on Basic Research in Education named by the National Academy of Sciences and the National Academy of Education. Data from this new research may help resolve conflicts in the "conventional wisdom" about children.

Schools in Poverty Areas

Schools in which more than half the enrollment comes from households with annual incomes below the poverty line are chronically understaffed. Inexperienced teachers affect a much larger number of pupils in poverty areas than in nonpoverty areas. Schools enrolling 50 percent or more Spanish-speaking pupils have the highest proportions of teachers lacking a postsecondary degree.

Congress amended ESEA in April 1970 to allow bonus payments to high-calibre teachers in ESEA programs. The amendment did not increase the amount of money available to the individual school.

During FY 70 the Government focused attention on the nature and context of the schools that purportedly serve disadvantaged students. OE completed a study of the Nation's schools, a followup on a 1966 study, *Equality of Educational Opportunity* (known as the "Coleman Report" for its primary investigator and author, Prof. James S. Coleman).

The study reviewed the original data collected on 650,000 students and their teachers and principals in 4,000 schools across the Nation. Over 40 percent were minority students. From the statistics came a new set of generalizations of some value: The influence of the school cannot be separated from that of the student's social background—and vice versa. Moreover, the common influence of the school and the student's social background exceeds either of their distinguishable influences.

Clearly in this FY 70 study the Government got a direct warning on the efficacy of poverty programs directed at unchanging schools. It also got an inkling of the methodology necessary to begin measuring with some hope of accuracy the effectiveness of a school as a place to learn. Probably most important for the immediate future, the study underscored the pressing need for stronger school-home and school-community partnerships.

Community Partnerships

The newest and potentially the most significant development in the area of school-community relations, based upon the formation of a "new breed" of teacher, was the start of the Career Opportunities Program (COP). COP recruits community people into a work-study program designed to enable trainees to enter the profession at various levels, from classroom aide to fully certified teacher. With an initial allocation of $24.3 million, the 130 COP projects have shown marked success toward achieving greater community involvement, as well as enriching the education profession. The 8,000 COP "education auxiliaries" have less than a baccalaureate degree; 12 percent do not have a high school diploma. Three-fourths of the auxiliaries are in elementary schools, supported by teacher-training institutions and directly employed by school districts.

This unique three-way partnership of community, university, and school district is insitutionalized in COP Community Councils. A fifth of the Councils chose community representatives to be their project directors; of the total number of directors, 56 percent are less than 40 years of age.

The COP Auxiliary.—COP auxiliaries are "high-risk" people in that there is little in any of their personal, family, or job histories to indicate they can "make it" in the world of education. They are predominantly black (60 percent), with a strong contingent of white (26 percent) primarily in the Ozark and Appalachian regions; the remainder (14 percent) are Spanish-surnamed or Indian. One out of eight in FY 70 was a Vietnam war veteran.

Low-income community people are not brought into classrooms to exercise discipline; they participate in teaching, administration, counseling community liaison, and other roles new to—but also vital to—the American school. COP personnel are also brought into a concurrent teacher-training program, moving them along from teacher aides to assistant teachers to interns and eventually to fully certified status.

The aforementioned study of the Nation's schools showed a strong bias for higher student achievement where the community was closely identified with the school and where students had a better sense of self-worth, particularly if they saw one of their own neighborhood people given school employment status. The COP projects are 130 variations on this basic, important theme.

Parental Involvement.—Following congressional intent, and urged on by the National Advisory Council on Education for the Disadvantaged, the Office of Education amended regulations governing ESEA projects to mandate "maximum practical involvement of parents of educationally deprived children in the area to be served." This involvement would be in the "planning, development, operation, and appraisal of projects, including their representation on advisory committees." The amendment was published in November 1968.

In May 1970, the HEW Office of Child Development published a special report indicating that Head Start, by itself, had already been involved in 1,500 indentifiable institutional changes in 58 selected communities. Food distribution, health service, public safety, and other community services had been affected.

A section of Public Law 91–230 again instructed the Commissioner of Education to promulgate regulations to encourage, increase, and institutionalize the role of "parents of children to be served." By midsummer, such regulations were being drafted.

New Teachers

Laudable and hopeful as these community and parent programs may be, they do not provide the solid, broad base of instruction that is needed.

That base must still come from teacher-training institutions committed to the infusion of excellence into our schools.

Among the recent initiatives in professional education has been the program designed to bring about change among Trainers of Teacher Trainers (TTT). One instructor, after all, influences between 100 and 150 future teachers during the academic year.

In FY 70, this $10 million TTT program brought together some 4,500 university professors and top-level school administrators in over 40 programs around the Nation to help transform and revitalize teacher education.

New ways of teaching teachers are also being employed. In "microteaching," an individual's performance in the actual teaching situation is recorded on videotape and played back. A few minutes of such "instant replay" on videotape can reveal to a teacher those elements that make or break him before children. Microteaching is now used in over half of all teacher-training programs in the country, and packaged self-instruction materials, called "minicourses," are used by inservice teachers to improve their efficiency. Both microteaching and minicourses were produced with OE research and development support.

Year of the Teacher Surplus.—When school opened in the fall of 1969, the increase in public elementary and secondary school enrollment was only 1.5 percent over the pre-

ceding year, while the increase in the number of teachers was 4.8 percent. The public schools reported over two million full- and part-time teachers for 45.6 million students.

In June of 1970, a great many of the 1,200 colleges and universities that train teachers released statements indicating that their teacher graduates were not being hired for the September school opening. According to the most current estimates from the National Center for Educational Statistics, there is now an excess of 85,000 new college graduates who are prepared to teach. Despite the surplus predicted from these nationally aggregated statistics, the latest National Education Association survey (conducted in late summer of 1970) found a total of 26 States reporting shortages of applications for regular classroom teaching jobs in rural areas. Six States report continued shortages in small cities, four in central urban areas. No States report shortages in suburban areas.

In specialized areas, however, teacher shortages do occur in the areas of mathematics; physical and natural sciences; trade, industrial, and vocational courses; and programs designed to aid the disadvantaged. This last shortage is among the most acute. Additionally, estimates by the American Council on Education indicate that since 1968 both the overall number and the percentage of entering college freshmen who plan a career in education are decreasing.

Models for Teacher Training

In the midst of great change, the need to deal on a large scale with the problems of teacher training and school transformation is imperative. OE invested $3.3 million on 35 grant projects to explore new staffing patterns in schools, particularly those patterns that join people with technology. Additional studies have been funded in Education Research and Development Centers at Stanford and the University of Texas to improve teaching and teacher education, and at the Universities of Oregon and California, the Stanford Research Institute, and Syracuse University to discover how to bring about change, how to evaluate change, and how to anticipate the problems of educational policy choice and decisionmaking in the last third of this century.

A $3-million research investment to develop 10 models of elementary teacher education programs was beginning to pay off in FY 70. Two features of these models are most prominent: An emphasis on proceeding in an orderly, planned manner, so that every action and decision is related to the ultimate goals of a model, and an emphasis on setting and using behavorial objectives.

Development of the 10 models emphasized these points:

1. The good elementary school teacher is a "manager" of the learning process, guiding instrumentation, procedures, and people, rather than simply a transmitter of information.
2. Structural and organizational traditions are ripe for change, with teacher-pupil workrooms, computer usage, individualized instruction, and heightened school-community interaction becoming more visible and important.

3. Learning rates become progressively better among all students as the instruction itself is more individually prescribed and the student assumes a greater share in the teaching-learning process.

Portal Schools.—To smooth the transition from training to teaching, the models use special "portal schools" in cooperating school districts so that teacher candidates gain experience in the kind of teaching needed for the world of tomorrow. One of the conclusions of the October 1969 Teacher Corps National Conference was to make these "portal schools" prerequisite in a district requesting members of the Teacher Corps. The Corps, beginning December 1969, was the Government's first formal attempt to bring teacher-trainers, student-teachers, and local schools together in a new, change-oriented relationship. The model elementary teacher development program sprang from that early initiative and is now the Corps' own favorite host.

Television.—To concentrate entirely on the school environment to effect higher student achievement is to ignore the overall dynamics of American life. One of these—possibly the most dynamic—is television.

There are approximately 89 million operating TV sets in the United States, one-third of the world total. The average high school graduate has spent about 11,000 hours of his young life in school—but 15,000 hours watching television. Hence, TV as an educational influence received more than usual attention by the Government in FY 70.

The 26-week, 130-program series called "Sesame Street," produced by the Children's Television Workshop, reached approximately 7 million preschoolers per week via 230 stations in FY 70. Of the total cost of $6.5 million in FY 70, OE support came to $1.5 million. The cost per viewer was $1.29 per year.

New Curriculum Developments

In FY 70 the National Science Foundation took leadership in getting institutions to develop new graduate course offerings and new kinds of educational techniques and methodology, and to move more diligently into interdisciplinary studies. Of the NSF's $440 million FY 70 budget, $120 million went to the improvement of instruction in the sciences; of this amount the largest single bloc ($50 million) supported science at the precollege level, involving 50,000 instructors in teacher-training institutes, seminars, workshops, and curriculum improvement projects.

Through the Office of Education, a new course (on videotape) of "Patterns in Arithmetic" was used by more than 300,000 children in 15 States during the 1969–70 school year; field tests indicated a marked increase above national norms for 1st-graders who had viewed the math programs.

Another program several years in development hit its stride in FY 70 also: Individually Prescribed Instruction (IPI). Fifty thousand students in the United States, plus several other thousands in selected schools overseas, received IPI in mathematics, reading, spelling, science, and handwriting. IPI pulls together a systems approach to individualized learning.

Drug Abuse Education

Of all the projects in teacher training and curriculum development that occurred in FY 70, few attracted as much national attention, both in and out of Government, as those concerned with the abuse of narcotics and dangerous drugs.

President Nixon announced on March 11, 1970, the creation of the National Drug Education Program in OE. Funds were allocated on the basis of population between 5 and 17 years of age within each State, with a minimum grant of $40,000 and a maximum of $210,000, per State. In addition, four training centers were developed to conduct 4-week summer training programs for more than 325 teachers, students, law enforcement personnel, and community representatives from all parts of the Nation.

OE has been cooperating with other Federal agencies, such as the National Institute of Mental Health, the Office of Economic Opportunity, the Bureau of Narcotics and Dangerous Drugs, and the Law Enforcement Assistance Administration, to achieve greater coordination of efforts in attacking the causes and symptoms of drug abuse. For example, OE and NIMH, with funds in excess of $250,000 administered by the latter agency, jointly designed a series of films to be used in educational institutions for training and sensitizing educational personnel as to the motivations for drug abuse, the milieu in which drug use and abuse flourishes, and the alternatives which can be provided to alleviate these conditions. These films were to be available for use by school systems by late summer or early fall with distribution provided through the efforts of both agencies.

Campus Unrest

Student behavior received attention beyond the research community. As of June 1970, there had been 7,200 campus arrests for the academic year—up dramatically from the 1968–69 total of 4,000 arrests. Twelve States passed criminal statutes among the 80 laws enacted to curb campus turmoil around the country. The suggestion was made in Congress that financial aid be permanently withdrawn from students convicted of criminal acts on campuses; the Administration turned back that suggestion as excessively punitive, administratively cumbersome, and without clear legal precedent.

The debate will last many years as to the true scope of the unrest during the 1969–70 academic year; it was clearly not a television network's inspiration, neither was it the typical campus experience that year. Unrest was not widespread among the Nation's 2,500 institutions of higher education; possibly no more than 10 percent of the campus population was involved. Paradoxically, as the unrest continued to capture media attention, the average youth of postsecondary school age remained as rooted in American values and traditions as his forebears.

Four different poll-takers plumbed the value system of college and noncollege youth at some time during FY 70 and found the following:

- Approximately 72 percent of college students and 82 percent of noncollege youths believed "competition encouraged excellence."
- 56 percent of students and 79 percent of nonstudents thought "hard work will always pay off."
- 75 percent of the students and 87 percent of the nonstudents believed "the right to private property is sacred."

Yet, student energies took other forms as well. OE allocated $700,000 in Cooperative Research funds to support 16 student- and youth-oriented projects. The majority were student initiated. The National Science Foundation, seeing that students were the moving force in its Undergraduate Special Projects Program, gave its first five FY 70 grants to student-oriented and -managed research projects. Because interest in environmental problems ran high in all proposals coming into NSF's Special Projects staff, the Foundation announced a new FY 71 program, Student-Originated Studies (SOS). The announcement was made on Earth Day, April 22, 1970.

FILMED FROM BEST AVAILABLE COPY

VI. Federal-State Partnership

Reform and innovation among Federal education agencies were clear themes during FY 70. They were, however, insufficient of themselves to bring about true change and increased responsiveness by government. The President recognized the need to revitalize the Federal-State partnership as a way of giving new substance to reform and innovation. Mr. Nixon indicated to Congress that "important areas of government decision-making must be returned to the regions and locales where the problems exist."

In FY 70, the Office of Education distributed $2 billion—over half its budget—to the States in a variety of categorical accounts, which the States in turn distributed to local education agencies and institutions. At the same time, OE distributed an additional estimated $109 million to the State agencies themselves to strengthen their leadership capabilities and to cover some of the planning, evaluation, and other administrative costs that are part of the bloc-grant overhead.

Expanding Regionalization

Money by itself, however, could not answer all the needs of a strong Federal-State partnership. By Presidential order, 10 regional boundaries were established common to the Departments of Labor, Housing and Urban Development, and HEW, and the Office of Economic Opportunity, and the Small Business Administration.

OE established 10 new positions of Regional Commissioners of Education, directly responsible to the Commissioner of Education, but exercising "administrative, technical, and programmatic direction for the review and approval of State plans, proposals, and amendments for regionalized programs."

As the decentralization—or regionalization—plans for education advanced, it was understood that the OE headquarters staff at Washington would begin to confine itself more to issues of national policy and program direction, congressional relations, national constituency relations, and the planning and evaluation functions. The regions would handle the flow of funds and reports, conduct the required audits, provide immediate technical assistance, and in general produce a quicker response to client needs.

The Fast Development.—In late August 1969, HEW initiated an effort to streamline Federal requirements for State assistance. Studies were begun on project grants, formula grants, and State plans. In OE, a Federal Assistance Streamlining Task Force (FAST) was established. Its prime charge was to review all OE programs (nearly $2 billion worth), group them as to common class (kind of grants, etc.), and begin to develop simplified, less time-consuming procedures for their handling at both the OE and recipient ends.

An Evaluation Partnership

Much of the success gained in Federal-State relations during FY 70 was built upon a base of candor and amity developed through the cooperative efforts of education

officials from both levels of government participating in the Federal/State Task Force on Educational Evaluation.

The Office of Education and the Council of Chief State School Officers agreed in August 1968 on "their common concern for effective evaluation of elementary and secondary education programs in the United States." The initial work plan of the task force was approved in June 1969, and FY 70 became the first full year of intensive effort in three general areas:

- "Jointly, to develop and install a common survey instrument that matches both OE and State education agency management systems." (This resulted in the Consolidated Program Information Report, or CPIR, referred to earlier under Coding and Terminology.)
- "Jointly, to develop and install pilot training programs for evaluation personnel in State and local education agencies."
- "Jointly, to develop and implement a long-range program of general and evaluative information" about the schools.

By the close of FY 70 task force efforts had resulted in:

- A trial run of CPIR for FY 69, using data collected from a national sample of local education agencies and pupils, staff, and expenditures by both pupil population group and services provided.
- The Elementary School Survey, which gathers specific program information from a nationally representative sample of school districts, teachers, pupils, and administrators in elementary education, making it possible to assess better the effectiveness of Federal education aid programs.

State Management Reviews

The Office of Education continued its State Management Review Program for the 5th year during FY 70. A review involves the dispatch of an intensively trained 8-to-15 member team to a State department of education for a week's observation and discussion. Although begun in the Bureau of Elementary and Secondary Education as a bureauwide activity, the review teams have been expanded to include personnel of other OE line and staff units, as well as from the regional offices.

Thirty States were visited under this program by the end of FY 70; all States will have undergone review within a 3-year period, when the cycle will begin anew. The reports of these reviews indicate the specific managerial problems faced by the State education agencies, and suggest how these problems may be solved. Although the reviews are technically confined to State conduct of federally supported programs, most chief State officers invite examination of their total administration, since it is virtually impossible to segregate the one from the other. The review teams bring from State to State exemplary practices they encounter, as well as solutions already found to problems which beset other States.

Improving Local Research

The Commissioner's investment in innovation at the local level took several forms, including "small project" research support ad-

ministered through the regional offices. In FY 70, the Office of Education put $1.9 million into small research projects, those which cost $10,000 or less and can be completed within 18 months. The projects help develop an awareness of and capability for research at the "grass roots," and provide for pilot studies and other significant small studies that would not be economical for larger, research-oriented institutions.

A similar effort was made by the National Science Foundation. The NSF had been using personnel and resources from outside the schools and colleges to improve the quality of science instruction in all grades. However, in FY 70 NSF began to support the science improvement capabilities of faculties and administrators within the schools themselves, encouraging local initiative with backup advisory groups.

OE's National Center for Educational Communication began in FY 70 to encourage and assist State and local education agencies to establish information service centers. Significant efforts thus far have been pilot dissemination programs in the State education agencies of Oregon, South Carolina, and Utah. In each of these States, Federal funds have permitted the hiring of field agents who assist local educators in identification of educational needs and problems. The field agents draw upon a reference and retrieval staff in the State agency for help in meeting these needs and problems. As required, specialists or consultants from the State agency may be enlisted to provide a district with technical assistance. Support has been provided to train personnel in these three State agencies.

If trends of the past few years continued in FY 70, local government expenditures for research probably reached $40 million. However, only about 10 percent of this was for education research, conducted by school systems. Federal agencies, therefore, have a real concern for building a research and development capability among local schools. Education, which has only 0.5 percent of its total annual outlay invested in research, can use all the new, capable help it can get in this important area.

Cooperation in a National Objective: Education of the Handicapped

A question lingers as to the ability of Federal and State and local education agencies to work together effectively for a significant national objective. One of the more positive illustrations of a hopeful answer is the way all levels of government have come together to aid the handicapped.

A total of $169 million in Federal funds was earmarked for education of the handicapped in FY 70. This program was highlighted by a concept of "mutuality of planning" between the States and the Federal Government. OE personnel and consultants met with State personnel in regional workshops to develop plans and program objectives and then to set target dates for accomplishing those objectives. The Federal Government advocated child-centered, total State planning that brought personnel in handicapped and special education programs together with those in vocational education and rehabilitation, child development, Medi-

caid, and child health and welfare services. The Office of Education took on its own "accelerated demonstration strategy" in FY 70, investing in major research and development projects from which State and local agencies could draw solid information and support.

In FY 70, about $37.5 million went to State-operated and State-supported programs for the handicapped. Most of the other funds—for teacher training, early childhood projects, special vocational education, and other programs—were expanded in providing services to handicapped children within the regular school and community setting. Nevertheless, of the estimated six million children with handicaps, about 3.8 million were receiving no services at all in FY 70. After consultation with experts in the field, OE set as its target the provision of appropriate educational services to at least 60 percent of the handicapped aged 3 through 21 by 1976.

Three general factors were identified by the Office as being as important as in reaching that target:

- Better methods for early and accurate identification
- More effective and efficient technology for treatment
- More sensitive, flexible educational policies and practices.

A section of the June 1969 report of the National Advisory Committee on Handicapped Children recommended "better methods of identification of those children in minority groups who should not be considered mentally retarded or emotionally disturbed but simply as disadvantaged; . . . [and] that adequate compensatory programs be developed for the disadvantaged, instead of pursuing the present practice of assigning these children to classes for the mentally retarded or emotionally disturbed."

Areas of Federal Impact

Laws enacted in 1950 sought to ease the tax burden of property owners in districts serving children connected to military installations, to defense production in Government-owned facilities, to public lands (including Indian lands and National Parks), and similar Federal enterprises. In April 1970, Congress included two additional categories: Children of refugees and children who live in low-rent public housing.

Congress appropriated $200,000 in 1969 for a study of impact aid; it was completed and sent to the Congress in December 1969. The study disclosed a high degree of overcompensation to many school districts and undercompensation to a few, an intolerable situation during this period of legislative, fiscal, and management reform in education.

VII. The Unfinished Agenda

Neither programs nor nations nor people live in fiscal year compartments; the device of the fiscal year is only that—a device by which some order can be perceived among the many moving parts of contemporary history. Hence, it may be fitting to treat certain FY 70 issues and events that may be more fully understood and discussed in FY 71.

Higher Education Foundation

A number of surveys of higher education were carried out in FY 70 indicating that colleges and universities were sliding steadily into large deficit budgets.

The Federal Government had long employed higher education for a variety of national assignments but now declined to invest as heavily as before. Seeing, as partial results of this decison, the closing of medical and dental schools, restrictions on nonresident enrollments in State schools, reduction of faculty, and withholding of tensure, the Government tried a variety of measures for redress and relief.

The President told the Congress, in his Message on Higher Education:

> . . . the time has come for the Federal Government to help academic communities to pursue excellence and reform in fields of their own choosing . . . and by means of their own choice.

The Government ought to assume, President Nixon said, that the choices of higher education would usually coincide with general national need. To demonstrate good faith, the Federal Government would establish a National Foundation for Higher Education to do for colleges and universities what the National Science Foundation has done for basic research facilities and the National Institutes of Health for hospitals and clinics. The Foundation would be the advocate of higher education within Government, pressing the value of campus excellence, reform, and innovation without a Federal leash. Legislation to create the Foundation was pending in FY 70.

Aid to Colleges Serving Black Students

The problems which beset higher education fall with particular force upon the traditionally black colleges. Mainly private and church-related, generally lacking large endowments and wealthy alumni, these institutions rely heavily upon student tuition as their primary source of income. Because tuition usually pays no more than half the cost of educating a student, severe dislocations have been caused by the recent inflation of academic salaries, construction costs, and operational requirements.

With a few outstanding exceptions, black institutions have not participated to any extent in Federal scientific research grants and contracts. They are almost entirely undergraduate institutions, lacking graduate research and training components.

Since passage of the Higher Education Act of 1965, Federal funding of black colleges has markedly increased but has centered largely on student aid and the Developing Institutions Program which allocated 57 percent of its funds to black colleges in FY 70, or $17 million. Student aid comprised 45 per-

cent of the total amount of Federal assistance to black colleges, against 21 percent for all institutions.

A total of almost $125 million was distributed by Federal agencies among more than 100 black institutions in FY 70. This was a 16 percent increase over FY 69 and represented 3.4 percent of total Federal expenditures for higher education ($3.7 billion in all). The Office of Education provided 68 percent of the total Federal support, or $84.6 million.

New Data for Education

Several attempts have been made over the past 10 years to reorganize and rationalize educational research and development, for the creation of new resources.

With more than 52 million students to be served—and with a goal of individually prescribed service—the dollars annually provided for research (though in excess of $100 million) are totally inadequate. President Nixon therefore proposed in FY 70 a National Institute for Education to bring into adequate focus the research needs of our schools. Research should move in tandem with new developmects in teacher training, school organization, community involvement, and finance. The Institute would be a self-starting, self-defending agency.

Desegregation and Emergency School Assistance

On July 3, 1969, the Attorney General of the United States and the Secretary of HEW issued a joint statement beginning: "This Administration is unequivocally committed to the goal of finally ending racial discrimination in schools, steadily and speedily." The statement served to tighten coordination of enforcement efforts by HEW and the Department of Justice, the agencies with primary responsibility for school desegregation policy.

Statistically, progress could be seen. In 1967 about 14 percent of the black student population in the 11 Southern States were attending majority-white schools. In 1968 this rose to 20 percent. During the 1969–70 school year it went up again to approximately 27 percent. This progress was accomplished despite a low level of funding—$10.7 million in FY 69, raised to $19.2 million in FY 70.

In FY 70 OE's Division of Equal Educational Opportunities supported five distinct program activities:

- Direct technical assistance from Office of Education staff
- Technical assistance and institute training in university school desegregation assistance centers
- Technical assistance units in State education agencies
- Grants to local school districts
- Training institutes in universities.

Funds supported training for educational personnel through institutes sponsored by 16 university school desegregation assistance centers, grants to 111 local education agencies for inservice programs, and six university institutes other than those in the centers.

It is estimated that 17,000 teachers and other school personnel received training in the university institutes and local school district inservice programs. About 66,870 such personnel were reported to have been included in diverse kinds of training programs sponsored by the centers.

Emergency School Aid Act of 1970.—By mid-spring of 1970, some 220 school districts were under court order to desegregate by September; 496 districts were negotiating with HEW on acceptable plans begun in 1968 or 1969, phasing into completion; and some 500 school districts in the North and West were coming under review for possible violations of the Civil Rights Act of 1964.

The President asked Congress to enact the Emergency School Aid Act of 1970, authorizing $1.5 billion to be spent over 2 years to assist school districts in meeting two problems—those caused by desegregation and those caused by racial isolation.

Recognizing that the Emergency School Aid Act would probably not be passed in time for the 1970–71 school year, the Administration requested $150 million in appropriations under existing authorities in the FY 71 budget to launch an Emergency School Assistance Program to aid in the desegregation of local school districts. (In August 1970 Congress appropriated $75 million for this purpose.)

National Origin Minority Program.—As FY 70 came to a close, the HEW's Office for Civil Rights indicated that it would give new emphasis to dealing with "school discrimination against national origin minority groups —the Mexican-Americans in the West and Southwest, the Puerto Ricans in the East and Northeast, the Chinese and Japanese of the West Coast." The Secretary announced a new policy statement prohibiting specific types of discrimination based on national origin. The central focus of this program is English-language skills for non-English-speaking children.

Teacher Training.—The Teacher Development for Desegregating Schools Program, begun in FY 70, will assume more prominence and promise. It provides funds for training to renew and enhance the professional skills of educational personnel who serve or will be serving in recently desegregated schools. Other kinds of assistance are being marshalled for obtaining quality education for all children. As the President has said: "We must not permit the controversy about the progress toward desegregation to detract from the shared purpose of all—better education and especially better education for the poor of every race and color."

Advisory Councils

In Public Law 91–230, enacted in April 1970, the Congress instructed the Executive Branch to establish six Office of Education advisory councils, enlarge one already established, and assist States in establishing a number of their own. On the other hand, section 438 of the law instructs the Commissioner of Education to review the work of each advisory council at his service and "abolish such advisory council or combine the functions of two or more advisory coun-

cils" if he considers such action in the public interest. The Commissioner is to report this to Congress by March 31 of each year in the Commissioner's Annual Report and his recommendations will take effect within 90 days "unless there is an objection to such action by either the Senate or the House. . . ."

A review of the nature of these councils—including the councils established in calendar year 1970—shows that they have been generally established complementary to programs enacted into law. Congress had sought to bring nongovernmental advice and counsel into the service of the Executive Branch by creating such statutory advisory councils. This was manageable when the Federal Government had a handful of major national education programs to administer: Support of public libraries, vocational education, some cooperative research, and payments to land-grant colleges. Today, however, there are more than 100 programs, with much overlap, interdisciplinary administration, convergence strategies for gaining cost effectiveness, and other complexities of modern management.

This would be a proper time to freeze the establishment of, and appointments to, any advisory councils serving education. A small staff of Office of Education personnel has therefore begun work on a 5-point program to be proposed to the Congress.

Part II.
Organization and Structure of Education

Organization

The present organization of education in the United States is one of decentralized authority. The 10th amendment to the Constitution provides that "the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." Since the responsibility for education is not mentioned in the Constitution, it is delegated to the States. Thus each State has the right and responsibility to organize and operate its educational system as it deems appropriate—subject to constitutional guarantees of the rights and privileges of United States citizens.

The educational responsibilities of the Federal Government are to provide encouragement, financial support, and leadership. The Congress of the United States has constitutional powers to allocate funds for education, but it has no direct control over education. Several departments within the Federal Government make large expenditures on specific educational programs (e.g., the Department of Defense and the Department of the Interior). The Federal agency having primary responsibility for education in the United States, however, is the Office of Education, within the Department of Health, Education, and Welfare. The Office provides leadership and cooperates with institutions and professional associations in efforts to strengthen and improve public education. For more than a century, the Office has collected, interpreted, and disseminated a wide range of educational data and information on educational progress. In recent years, specific Congressional legislation has called upon the Office of Education to administer many kinds of educational programs, research, and services.

Since each of the States* is responsible for its own educational system, their practices and policies differ. In each State, the State department of education and its controlling State board of education and chief State school officer hold central authority for the State's educational enterprise. The legislature, as the source of power, enacts laws pertaining to education for both public and nonpublic schools in the State, but the State department of education and local school districts are responsible for the operation of the school system.

The State board of education determines State educational policies in compliance with State laws. Board members are elected by the people or appointed by the State Governor, and serve for terms ranging from 2 to 6 years. They are empowered to formulate policies relating to educational affairs such as allocation of school funds, certification of teachers, textbook and library services, provision for records and educational statistics, and overall coordination of the State school system. The board's responsibility may include not only elementary and secondary schools but State institutions for teacher education and special schools for the handicapped.

* In this context, States include the 50 States of the Union, the District of Columbia, and the outlying areas.

The key education official and chief executive officer of the State board of education is the chief State school officer. The title given to this official most frequently is Superintendent of Public Instruction or State Commissioner of Education, but he may also be called Superintendent of Education, Superintendent of Schools, Superintendent of Public Education, or Secretary of Education. He may be elected by the people or he may be appointed by the Governor of the State or by the State board of education; he serves from 1 to 6 years, his term of office usually determined by the board. He is responsible for administering the State school system and implementing policies adopted by the board. As the key official of the board, he gives leadership to the staff of the State department of education, which is composed of supervisory, professional, and administrative personnel appointed by him or by the board. The State professional personnel of elementary, secondary, and specialized fields of education work with local school officials in an advisory capacity to provide consultative and other services.

Each State has provided for the establishment of local administrative districts and vested them with extensive authority and responsibility for establishing and regulating the schools in their districts. Each local school district has a board of education, usually five to seven members elected by citizens of the school district. Within the limits of State policy, the local board operates the local school system. The functions of the board of education in determining educational policies, and of the superintendent of schools in executing these policies, include a broad range of duties and responsibilities. Together, the board and the superintendent are responsible for preparing the school budget and, in most cases, for determining the amount of local taxes necessary to finance the school program. They are responsible for employing teachers and other school personnel, for providing and maintaining school buildings, for purchasing school equipment and supplies and, in most cases, for providing transportation facilities for pupils who live beyond a reasonable walking distance from school. Their duties also include enacting rules and regulations consistent with State law and regulations of the State department of education governing the operation of the schools. Thus, the limitations on the actions of school boards are those established by the State legislature and by the State education agencies. Most States have prescribed minimum standards for all local school districts.

One of the unique characteristics of United States education is the degree to which schools are operated by local school authorities. The broad authority given local boards of education allows public educational programs to be responsive to the will of the people and the needs of the community.

The decentralized character of the educational system is even greater at the higher education (tertiary) level. This is because private higher education schools in the United States predated State departments of education. The early autonomy set them apart from the mainstream of publicly

financed schools and established a precedent for their relative independence.

Higher education institutions in the United States offer diverse programs and vary in size and pattern of organization—a few are operated by units of local and State government but most are privately operated. They have achieved some degree of uniformity of standards and practices by affiliating with regional and national professional associations (including accrediting agencies).

Most colleges and universities, whether under private or public auspices, are administered by a governing body or board, usually known as a board of trustees, governors, or regents. Members of the board may be appointed or elected for a specified period of time or for life. An institution charter, issued by the State, provides for procedures naming the first board of trustees and for selecting their successors. Board members of a publicly controlled institution usually are elected by the citizens of the State or appointed by the Governor. Board members of a private institution may be appointed by the board of trustees and in some colleges and universities the alumni may have a role in their selection. New organizational patterns are emerging which give students and faculty an increased share in the decisionmaking process that governs the operation of colleges and universities.

The board of trustees makes decisions regarding policies, management, and personnel, but the president or chancellor of the university, with the administrative staff, is responsible for operating the institution. The board also selects the president, who, with the assistance of one or more vice presidents, directs the general administration of the institution. In a small institution the dean of instruction may be responsible for administration and educational programs. He is assisted by departmental or divisional chairmen and by the faculties which work as committees on the many problems and issues that can and do arise. Other administrative officials include the registrar, the director of admissions, the business officer, and the director of student affairs.

Structure

No major changes have taken place during 1969–70 in the structure of education in the United States (figure 1). Elementary (primary) schools provide education for at least 6 years, and in some schools for 8 years. The minimum entrance age is 6. Secondary schools provide education for at least 4 years and in some cases 6 years. The minimum entrance age is 12 or 14. The period for compulsory education covers 10 to 12 years within the age limits of 6–7–8 to 16–17–18. Completion of 12 grades of schooling is required before entering postsecondary education. Higher education includes college-level curriculums pursued after graduation from high school.

The school year for public elementary and secondary schools usually begins in September and ends in June; the fiscal year usually starts in July. There is an increasing tendency to make educational opportunities available to children throughout the year, includ-

ing the summer months, and in a variety of settings such as camps, after-school centers, and mobile schools.

Schools in the United States are continually experimenting with different plans of organization. Among the plans currently receiving favorable attention is the "nongraded primary" school. The concept underlying this plan is to eliminate specific grade placement for each pupil and to allow continuous promotion during the primary classes. This plan allows the child to progress at his own rate in all subject areas. In some school systems the plan allows flexibility during the first 3 or 4 years of school, and in some during the entire elementary period. Middle schools are gradually increasing in number. Combining the 4 grades from 5th through 8th, they stand midway between the early years of the elementary school and the final years of the secondary.

The elementary school is composed of the nursery school and kindergarten (as beginning units) and of an additional 6 or 8 grades, depending on the organizational structure. The nursery school, planned for 3- or 4-year-olds, may be for a period of 1 or 2 years before the childern enter kindergarten. The kindergarten enrolls 4- or 5-year-old children for 1 or 2 years, prior to their entrance to the 1st grade. In some school districts, the two beginning units overlap. Approximately 73 percent of the 5-year-olds in the population are enrolled in kindergarten. The majority of children in the United States enter school at the age of 5 or 6 and progress through elementary and secondary schools.

In the 8–4 plan used in many schools, students pursue grades 1 through 8 in an elementary school, and grades 9 through 12 in a secondary school. The 6–3–3 plan provides for an elementary school of 6 grades and a junior and senior high school of 3 grades each. Smaller communities sometimes use the 6–6 plan with 6 years each for both the elementary and secondary school programs. The purpose of the different organizational plans is to make the best use of a school system's physical facilities rather than to provide different curriculums of instruction at the elementary and secondary school level.

The secondary level in the United States may be a 4-year program or a 6-year program if it includes the junior high school (grades 7 and 8) in its organizational plan. The usual entrance age for junior high school is 12 years and for senior high school, 14 years.

After satisfactorily completing 12 years of elementary and secondary education, a student graduates usually at the age of 17 or 18 years.

High school graduates may enter a junior or community college, a technical institute, a special career program, or a 4-year college. The junior or community college offers a 2- or 3-year program of study beyond the secondary level. Programs usually include a curriculum leading to a certificate. Sometimes they give credits which may be used toward a bachelor's degree in a 4-year college. Some programs are terminal in nature and prepare students to become proficient in one of a wide variety of semiprofessional and techni-

cal areas. They also may offer general courses of continuing education for adults.

The community college is supported and controlled by the community in which it is located. It serves students in the immediate comunity and those who live within commuting distance. Fees are reasonable and because students live at home they have no additional expenses for room and board.

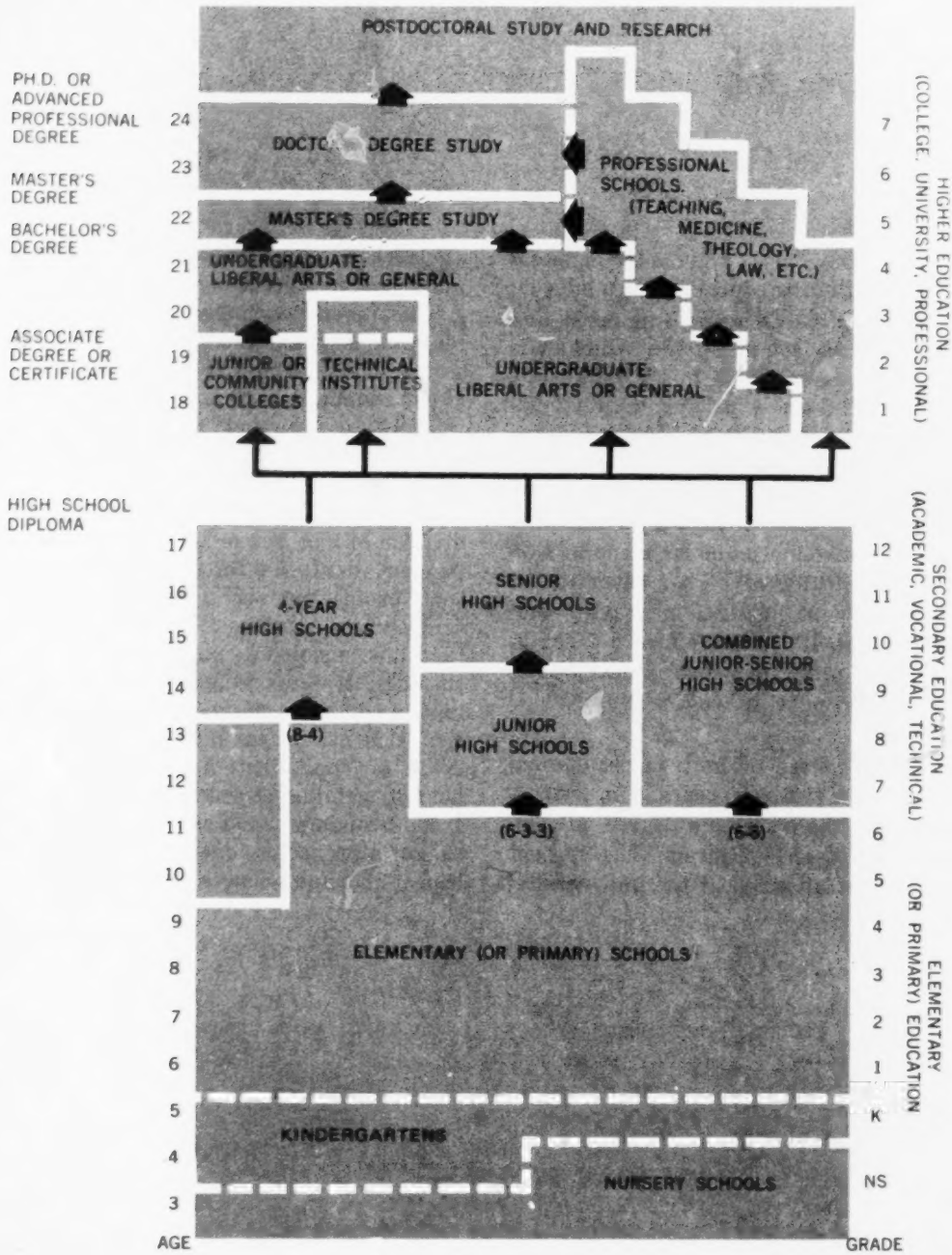
The technical institute is an institution organized as a division or department in a 2- or 4-year institution of higher education or as an independent institution of postsecondary education. It usually offers a 2- or 3-year terminal program which is designed to lead to employment in engineering-related occupations.

The 4-year college offers a curriculum in the liberal arts and sciences and is authorized to confer the bachelor's degree on completion of the 4-year program. The student may begin specialization at the undergraduate level. A college may be independent or an undergraduate division of a university.

The university usually includes a college of liberal arts and sciences, one or more professional schools, and a graduate school which offers advanced study and research. It is authorized to confer the bachelor's, master's, and doctor's degrees in liberal arts, professional, and scientific fields.

The professional school is either a major division of a college or university or an independent institution for study and research in such professional or technological fields as architecture, business, education, engineering, law, medicine, physical sciences, and theology. It offers programs which lead to a higher education degree and fulfill academic requirements for certification or licensure in fields of specialization. Depending on the field of training, entrance requirements vary from secondary school graduation to completion of a preprofessional curriculum in a college of arts and sciences.

Figure 1.—The structure of education in the United States



SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics*, 1970.

Part III.
General Statistics on Education

NOTE.—The charts and text of part III are prepared each year by the Office of Education's National Center for Educational Statistics for this annual report on the progress of public education in the United States.

The year 1969–70 was another period of continuous growth in enrollments, teaching staff, and Federal expenditures for education. Amendments to Federal legislation allowed continued assistance for ongoing programs as well as the organization of new activities which centered on support for students, professional personnel, and facilities. Sixty-two million people were actively involved in the educational enterprise, which cost about $70.6 billion, or approximately 7.6 percent of the Gross National Product.

Enrollment

In fall 1969 almost 59 million students were enrolled in American educational institutions from kindergarten through graduate school. This represented 29 percent of the Nation's population of 203 million. From 1968 to 1969 enrollment increased by about 950,000, or 1.6 percent. The largest rate of increase (5.4 percent) was at the higher education level (table 1).

In 1969 more than three-fourths of the 5-year-olds, 90 percent of the 16- and 17-year-olds, and over 50 percent of the 18- and 19-year-olds were attending school (table 2).

In fall 1969 the enrollment in grades 9 through 12 was equal to about 94 percent of the population 14 to 17 years of age (table 3).

Instructional Staff

Between fall 1968 and fall 1969, a 3.8 percent increase took place in the instructional staff of institutions at all educational levels. This raised the total staff to 2,841,000. The highest rate of increase, 6.6 percent, occurred in public institutions of higher education (table 4).

Between 1964 and 1969, the number of classroom teachers in public elementary and secondary schools increased by 22 percent. During the same 5-year period, the number of pupils enrolled rose by only 10 percent. Thus the number of pupils per teacher decreased from 25.1 in 1964 to 22.7 in 1969 (table 5).

Graduates

In school year 1968–69 more than 2.8 million young people graduated from high schools. The number of girls graduating exceeded the number of boys by 23,000. The total number of high school graduates was equal to about 78 percent of the 17-year-olds in the population. A decade ago only about 65 percent of the young people earned high school diplomas (table 6).

A total of 984,000 bachelor's, first professional, master's, and doctor's degrees were conferred in the United States in 1968–69 (table 7). This was the largest number of degrees ever conferred in a single year. A further increase to 1,032,000 is estimated for 1969–70.

In 1968–69, at the bachelor's and at the master's level, more degrees were conferred

Table 1.—Enrollment in educational institutions, by grade level and by type of school: United States, fall 1968 and fall 1969

(In thousands)

Grade level and type of school	Fall 1968	Fall 1969	Percent of change, 1968 to 1969
Total: elementary, secondary, and higher education	57,982	58,929	1.6
Kindergarten through grade 8	36,785	37,097	.8
Public school systems (regular full-time)	32,185	32,597	1.3
Nonpublic schools (regular full-time) [1]	4,400	4,300	−2.3
Other schools [1 2]	200	200	.0
Grades 9 through 12	14,269	14,532	1.8
Public school systems (regular full-time)	12,759	13,022	2.1
Nonpublic schools (regular full-time) [1]	1,400	1,400	.0
Other schools [1 2]	110	110	.0
Kindergarten through grade 12	51,054	51,629	1.1
Public school systems (regular full-time)	44,944	45,619	1.5
Nonpublic schools (regular full-time) [1]	5,800	5,700	−1.7
Other schools [1 2]	310	310	.0
Higher education: universities, colleges, professional schools, teachers colleges, and junior colleges (degree-credit enrollment)	6,928	[3]7,300	5.4

[1] Estimated.
[2] Includes federally operated schools, subcollegiate departments of higher education institutions, and residential schools for exceptional children.
[3] Estimated from total enrollment, which also includes undergraduate students in occupational programs not creditable toward a bachelor's degree. There were more than 600,000 of these non-degree-credit students in 1969.
Note.—Fall enrollment is usually smaller than school-year enrollment, since the latter is a cumulative figure which includes students who enroll at any time during the year.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, surveys and estimates of the National Center for Educational Statistics.

Table 2.—Percent of the population 5 to 34 years old enrolled in school, by age: United States, selected years, October 1947 to October 1969

Year	Total, 5 to 34 years	5 years [1]	6 years [1]	7 to 9 years	10 to 13 years	14 and 15 years	16 and 17 years	18 and 19 years	20 to 24 years	25 to 29 years	30 to 34 years
1	2	3	4	5	6	7	8	9	10	11	12
1947	42.3	53.4	96.2	98.4	98.6	91.6	67.6	24.3	10.2	3.0	1.0
1952	46.8	57.8	96.8	98.7	98.9	96.2	73.4	28.7	9.5	2.6	1.2
1957	53.6	60.2	97.4	99.5	99.5	97.1	80.5	34.9	14.0	5.5	1.8
1962	57.8	66.8	97.9	99.2	99.3	98.0	84.3	41.8	15.6	5.0	2.6
1967	60.2	75.0	98.4	99.4	99.1	98.2	88.8	47.6	22.0	6.6	4.0
1968	60.0	74.9	98.3	99.1	99.1	98.0	90.2	50.4	21.4	7.0	3.9
1969	60.0	76.2	98.2	99.3	99.1	98.1	89.7	50.2	23.0	7.9	4.8

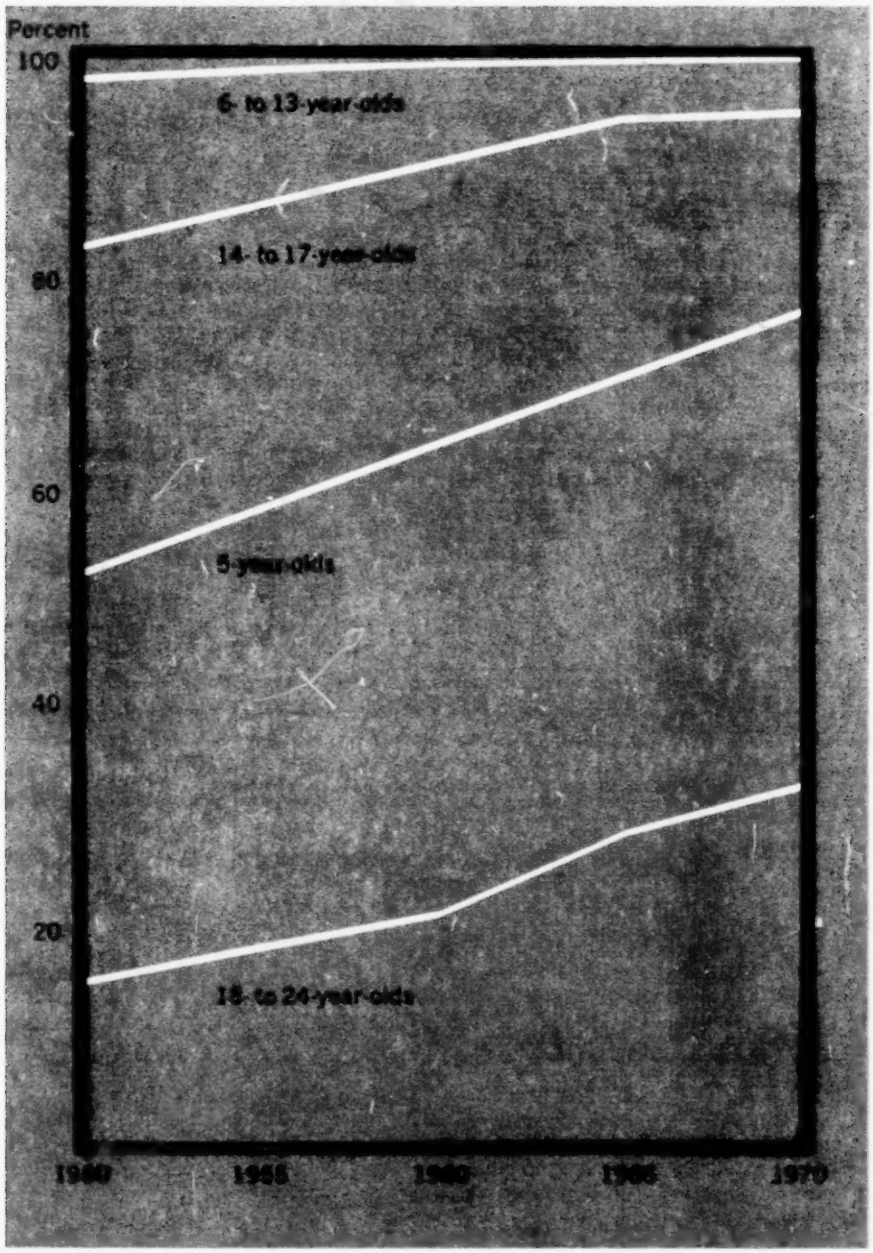
[1] Includes children enrolled in kindergarten.
SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20.

Table 3.—Enrollment in grades 9–12 of public and nonpublic schools compared with population 14–17 years of age: United States, selected years, 1889–90 to fall 1969

School year	Enrollment, grades 9–12 and postgraduate [1]			Population 14–17 years of age [2]	Total number enrolled per 100 persons 14–17 years of age
	All schools	Public schools	Nonpublic schools		
1889–90	359,949	[3] 202,963	[3] 94,931	5,354,653	6.7
1899–1900	699,403	[3] 519,251	[3] 110,797	6,152,231	11.4
1909–10	1,115,398	[3] 915,061	[3] 117,400	7,220,298	15.4
1919–20	2,500,176	[3] 2,200,389	[3] 213,920	7,735,841	32.3
1929–30	4,804,255	[3] [4] 4,399,422	[3] [4] 341,158	9,341,221	51.4
1939–40	7,123,009	6,635,337	487,672	9,720,419	73.3
1949–50	6,453,009	5,757,810	695,199	8,404,768	76.8
1959–60	9,599,810	8,531,454	1,068,356	11,154,879	86.1
Fall 1965	13,020,823	11,657,808	1,363,015	[5] 14,104,000	92.3
Fall 1967	13,720,000	[6] 12,320,000	[7] 1,400,000	[5] 14,614,000	93.9
Fall 1969	14,492,000	[6] 13,092,000	[7] 1,400,000	[5] 15,460,000	93.7

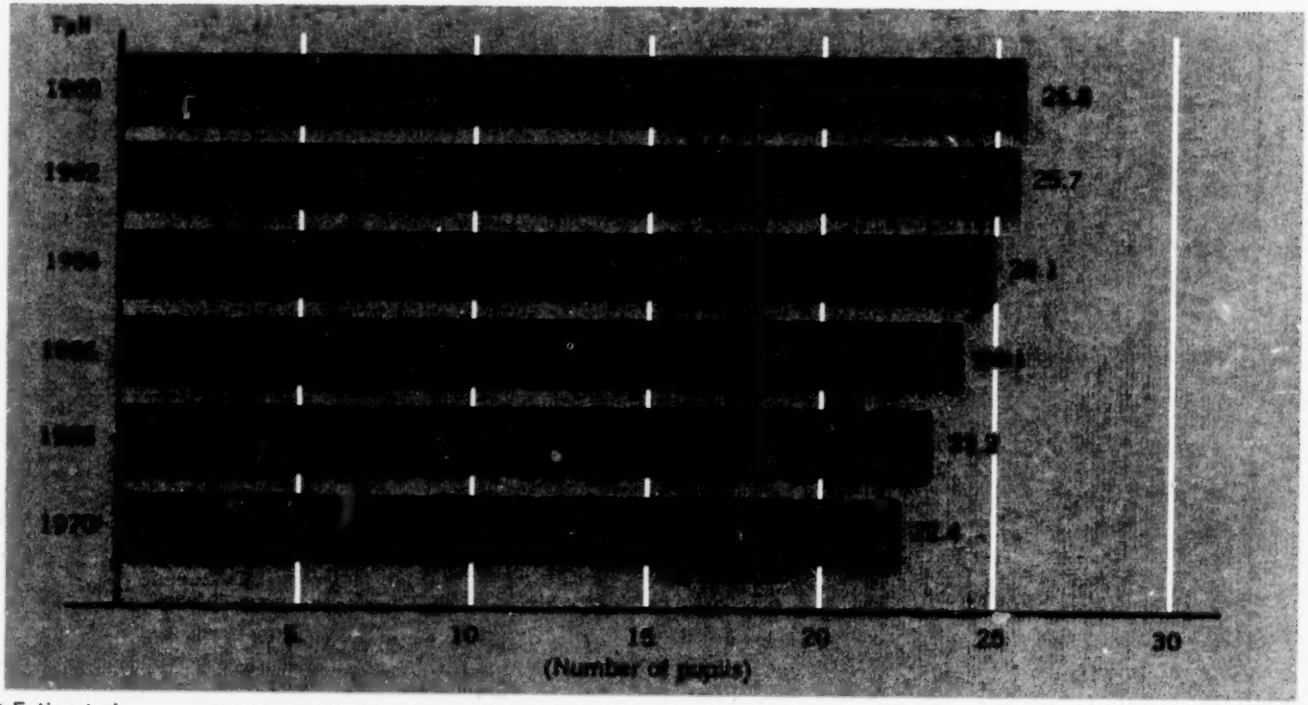
[1] Unless indicated, includes enrollment in subcollegiate departments of higher education institutions and in residential schools for exceptional children. Beginning in 1949-50, also includes Federal schools.
[2] Includes all persons residing in the United States, but excludes Armed Forces overseas. Data shown are actual figures from the decennial censuses of population unless otherwise indicated.
[3] Excludes enrollment in subcollegiate departments of higher education institutions and in residential schools for exceptional children.
[4] Data for 1927-28.
[5] Estimated by the Bureau of the Census as of July 1 preceding the opening of the school year.
[6] Includes an estimated 70,000 pupils enrolled in subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools.
[7] Estimated.
Note.—Beginning in 1959-60, includes Alaska and Hawaii.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970.*

Figure 2.—PERCENT OF THE SCHOOL-AGE POPULATION ENROLLED IN SCHOOL: UNITED STATES, OCTOBER 1950 TO 1970



SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20; and Office of Education estimates for 1970 based upon past trends.

Figure 3. — NUMBER OF PUPILS PER TEACHER IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS: UNITED STATES, FALL 1960 TO 1970



[1] Estimated.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Fall Statistics of Public Schools.*

Table 4.—Number of classroom teachers in elementary and secondary schools, and instructional staff members in higher education institutions: United States, fall 1968 and fall 1969 [1]

(In thousands)

Level and type of school	Fall 1968	Fall 1969	Percent of change, 1968 to 1969
1	2	3	4
Total: elementary, secondary, and higher	2,738	2,841	3.8
Elementary schools	1,237	1,269	2.6
Public (regular full-time)	1,076	1,108	3.0
Nonpublic (regular full-time)	147	147	.0
Other [2]	14	14	.0
Secondary school	946	994	5.1
Public (regular full-time)	860	906	5.3
Nonpublic (regular full-time)	78	80	2.6
Other [2]	8	8	.0
Elementary and secondary schools	2,183	2,263	3.7
Public (regular full-time)	1,936	2,014	4.0
Nonpublic (regular full-time)	225	227	.9
Other [2]	22	22	.0
Higher education [3]	555	578	4.1
Public	349	372	6.6
Nonpublic	206	206	.0

[1] Includes full-time and part-time teachers and staff. All figures except those for public elementary and secondary schools are estimated.
[2] Includes federally operated schools, subcollegiate departments of institutions of higher education, and residential schools for exceptional children.
[3] Includes faculty for resident instruction in degree-credit courses; excludes faculty engaged in administration, research, extension work, etc.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, surveys and estimates of the National Center for Educational Statistics.

Table 5.—Comparative statistics on enrollment, teachers, and schoolhousing in full-time public elementary and secondary schools: United States, fall 1964 and fall 1969

Item	Fall 1964	Fall 1969	Percent of increase, 1964 to 1969
1	2	3	4
Enrollment	41,416,421	45,618,578	10.1
Elementary schools	26,221,715	27,455,152	4.7
Secondary schools	15,194,706	18,163,426	19.5
Classroom teachers	1,648,184	2,013,836	22.2
Elementary schools	940,104	1,107,774	17.8
Secondary schools	708,080	906,062	28.0
Pupil-teacher ratio, all schools	25.1	22.7	—
Elementary schools	27.9	24.8	—
Secondary schools	21.5	20.0	—
Instruction rooms available	1,549,000	1,835,626	18.5
Number completed during preceding school year	69,300	69,700	.6

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, reports on *Fall Statistics of Public Schools.*

in education, in the social sciences, and in business and commerce (in that order) than in other fields of study. At the doctoral level, education, physical sciences, engineering, social sciences, and biological sciences (in that order) were the predominant fields (table 8).

School Retention Rates and Educational Attainment

From 1924 to 1961 the proportion of 5th grade pupils who went on to graduate from high school 8 years later increased from about 30 to 76 percent. The increase in college attendance is even more striking: Approximately 45 percent of the 5th graders in 1961 entered college in 1969, whereas in the early 1930's only about 12 percent of the 5th graders entered college (table 9 and figure 4).

The population 25 to 29 years of age in March 1970 had completed nearly one-half year of school more than had the total adult population 25 years old and over. Of the 25–29 age group, 75 percent were high school graduates, compared with only 55 percent of the total adult group. Sixteen percent of the young adults were college graduates, as compared with only 11 percent of the population 25 years of age and over (table 10).

In the 20th century there has been a steady reduction in the percent of illiterate persons in the United States—from 11.3 percent in 1900 to 2.4 percent in 1960 (table 11). The 1970 Census of Population is expected to show a continuation of this trend.

Income

Local, State, and Federal governments supply virtually all the revenue for public elementary and secondary schools in the United States. Income from other sources, such as gifts and fees, amounts to less than one-half of 1 percent of total revenue receipts. In 1967–68, 53 percent of the funds came from local sources, 38 percent from State governments, and 9 percent from the Federal Government. Estimates for 1969–70 indicate that local sources supplied about $20.4 billion; State governments, $15.5 billion; and the Federal Government, $2.8 billion (table 12).

Total Federal grants and loans for education increased by more than 15 percent between 1969 and 1970. The largest increase (27 percent) was in grants for vocational-technical and continuing education (table 13).

Expenditures

Expenditures for public elementary and secondary education in the United States have risen by 90 percent in the past 6 years, reaching a total cost of about $40.6 billion in school year 1969–70. The total expenditure per pupil in average daily attendance in 1969–70 is estimated at $926 (table 14).

The expenditures for education at all levels, public and private, reached $70.6 billion in 1969–70. This figure represents 7.6 percent of the Gross National Product (GNP). The percent of GNP devoted to education has risen steadily since it hit a low of 1.8 in 1943–44 during World War II (table 15).

Table 6.—Number of high school graduates compared with population 17 years of age: United States, selected years, 1869–70 to 1968–69

School year	Population 17 years old [2]	High school graduates [1]			Number graduated per 100 persons 17 years of age
		Total	Boys	Girls	
1869–70	815,000	16,000	7,064	8,936	2.0
1879–80	946,026	23,634	10,605	13,029	2.5
1889–90	1,259,177	43,731	18,549	25,182	3.5
1899–1900	1,489,146	94,883	38,075	56,808	6.4
1909–10	1,786,240	156,429	63,676	92,753	8.8
1919–20	1,855,173	311,266	123,684	187,582	16.8
1929–30	2,295,822	666,904	300,376	366,528	29.0
1939–40	2,403,074	1,221,475	578,718	642,757	50.8
1949–50	2,034,450	1,199,700	570,700	629,000	59.0
1959–60	2,862,005	1,864,000	898,000	966,000	65.1
1963–64	3,001,000	2,290,000	1,121,000	1,169,000	76.3
1965–66	3,515,000	2,632,000	1,308,000	1,324,000	74.9
1967–68	3,521,000	2,702,000	1,341,000	1,361,000	76.7
1968–69 [3]	3,622,000	2,839,000	1,408,000	1,431,000	78.4

[1] Includes graduates of public and nonpublic schools.
[2] Data from the Bureau of the Census.
[3] Preliminary data.
Note.—Beginning in 1959-60, includes Alaska and Hawaii.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970.*

Table 7.—Earned degrees conferred by higher education institutions: United States, selected years, 1869–70 to 1969–70

Year	Earned degrees conferred			
	Total	Bachelor's and first professional	Master's except first professional	Doctor's
1869–70	9,372	9,371	0	1
1879–80	13,829	12,896	879	54
1889–90	16,703	15,539	1,015	149
1899–1900	29,375	27,410	1,583	382
1909–10	39,755	37,199	2,113	443
1919–20	53,516	48,622	4,279	615
1929–30	139,752	122,484	14,969	2,299
1939–40	216,521	186,500	26,731	3,290
1949–50	496,661	432,058	58,183	6,420
1959–60	476,704	392,440	74,435	9,829
1963–64	614,194	498,654	101,050	14,490
1965–66	709,832	551,040	140,555	18,237
1967–68	866,548	666,710	176,749	23,089
1968–69	984,129	764,185	193,756	26,188
1969–70 [1]	1,032,500	784,000	219,200	29,300

[1] Estimated.
Note.—Beginning in 1959-60, includes Alaska and Hawaii.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970,* and *Projections of Educational Statistics to 1979-80.*

Table 8.—Earned degrees conferred by higher education institutions, by area of study and by level: United States, 1968–69

Area of study	Bachelor's degrees requiring 4 or 5 years	First-professional degrees requiring at least 6 years	Master's degrees	Doctor's degrees (Ph.D., Ed.D., etc.)
1	2	3	4	5
All areas	728,845	35,340	193,756	26,188
Agriculture	8,044	—	1,696	605
Architecture	3,331	—	579	7
Biological sciences	35,308	—	5,743	3,051
Business and commerce	93,561	—	19,325	533
Computer science and systems analysis	933	—	1,012	64
Education	152,257	—	71,076	4,829
Engineering	41,248	—	15,240	3,377
English and journalism	59,476	—	9,309	1,173
Fine and applied arts	31,588	—	7,413	684
Foreign languages and literature	21,685	—	5,034	749
Forestry	1,921	—	374	94
Geography	3,333	—	563	124
Health professions	19,825	13,673	4,067	283
Home economics	8,979	—	1,149	102
Law	415	17,053	830	18
Library science	1,000	—	5,932	17
Mathematical subjects	27,209	—	5,713	1,097
Military science	1,895	—	—	—
Philosophy	6,100	—	694	286
Physical sciences	21,480	—	5,895	3,859
Psychology	29,332	—	4,011	1,551
Religion	5,276	4,338	2,884	346
Social sciences	140,960	—	22,649	3,150
Trade and industrial training	4,269	—	129	14
Other fields	9,420	276	2,439	175

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics*, 1970.

Table 9.—Estimated retention rates, 5th grade through college entrance, in public and nonpublic schools: United States, selected years, 1924–32 to 1961–69

School year in which pupils entered 5th grade	For every 1,000 pupils entering 5th grade in a specified year, this number—				
	Entered 6th grade 1 year later	Entered 7th grade 2 years later	Entered 8th grade 3 years later	Entered 9th grade 4 years later	Entered 10th grade 5 years later
1924–25	911	798	741	612	470
1934–35	953	892	842	803	711
1944–45	952	929	858	848	748
1954–55	980	979	948	915	855
Fall 1958	983	979	961	946	903
Fall 1960	980	973	967	952	913
Fall 1961	991	985	978	961	932
	Entered 11th grade 6 years later	Entered 12th grade 7 years later	Graduated from high school 8 years later (i.e., in the year shown)		Entered college 8 years later
1924–25	384	344	302 (in 1932)		118
1934–35	610	512	467 (in 1942)		129
1944–45	650	549	522 (in 1952)		234
1954–55	759	684	642 (in 1962)		343
Fall 1958	842	761	732 (in 1966)		384
Fall 1960	858	787	749 (in 1968)		452
Fall 1961	864	799	759 (in 1969)		454

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970.*

Table 10.—Level of school completed by persons 25 years old and over, and 25 to 29 years old: United States, selected years, 1940 to 1970

Date and age	Percent by level of school completed			
	Fewer than 5 years of elementary school	4 years of high school or more	4 or more years of college	Median school years completed
25 years and over				
March 1970	5.3	55.2	11.0	12.2
March 1966	6.5	49.9	9.8	12.0
March 1964	7.1	48.0	9.1	11.7
March 1962	7.8	46.3	8.9	11.4
March 1959	8.0	42.9	7.9	11.0
April 1950	10.8	33.4	6.0	9.3
April 1940	13.5	24.1	4.6	8.4
25 to 29 years				
March 1970	1.1	75.4	16.4	12.6
March 1966	1.6	71.0	14.0	12.5
March 1964	2.1	69.2	12.8	12.4
March 1962	2.4	65.9	13.1	12.4
March 1959	3.0	63.3	11.0	12.3
April 1950	4.6	51.7	7.7	12.1
April 1940	5.9	37.8	5.8	10.4

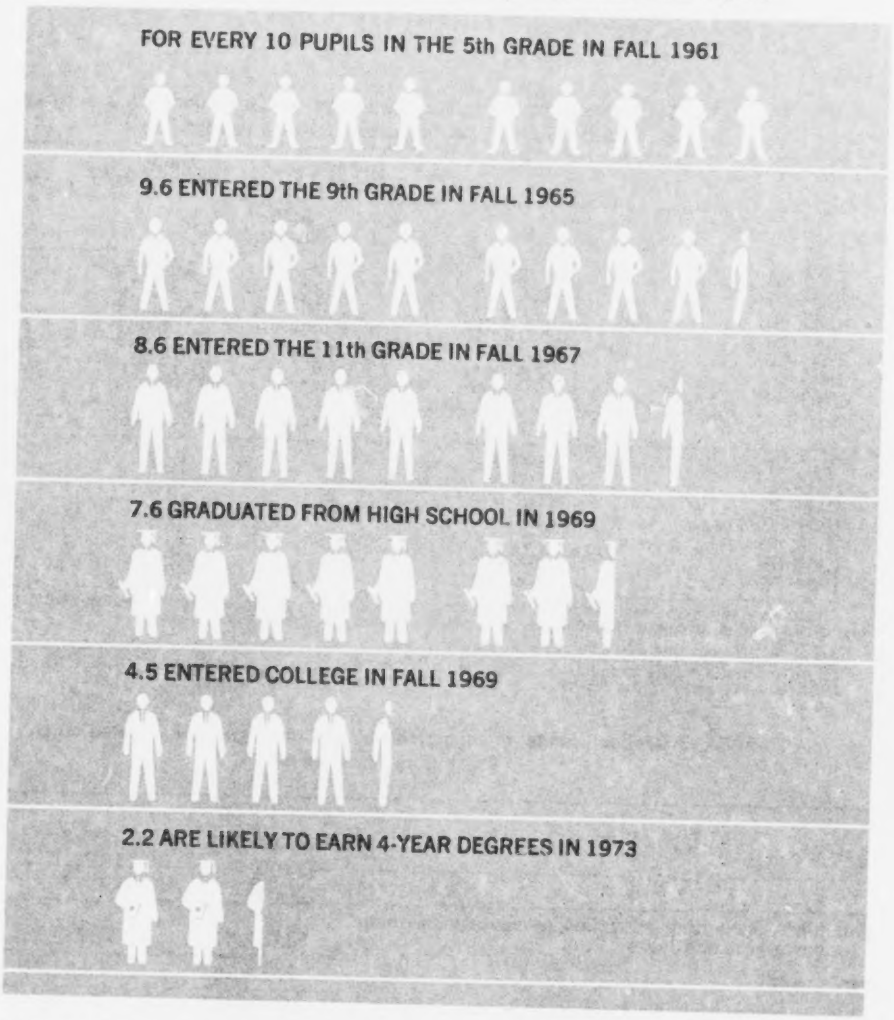
Note.—Beginning in 1962, includes Alaska and Hawaii.
SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20 and P-19; and *1960 Census of Population*, vol. 1, Part 1.

Table 11.—Percent of illiteracy [1] in the population: United States, 1900 to 1960

Year	Percent illiterate [2]	Year	Percent illiterate [2]
1900	11.3	1930	4.8
1910	8.3	1950 [3]	3.3
1920	6.5	1960 [3]	2.4
		1969	1.0

[1] Illiteracy is defined as the inability to read and write a simple message either in English or in any other language.
[2] Percentages refer to the population 15 years old and over from 1900 to 1930 and to the population 14 years old and over in 1950 and 1960.
[3] Estimated.
Note.—Data are for 50 States and the District of Columbia.
SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-23, no. 8.

Figure 4.—ESTIMATED RETENTION RATES, 5TH GRADE THROUGH COLLEGE GRADUATION: UNITED STATES, 1961 TO 1973


FOR EVERY 10 PUPILS IN THE 5th GRADE IN FALL 1961
9.6 ENTERED THE 9th GRADE IN FALL 1965
8.6 ENTERED THE 11th GRADE IN FALL 1967
7.6 GRADUATED FROM HIGH SCHOOL IN 1969
4.5 ENTERED COLLEGE IN FALL 1969
2.2 ARE LIKELY TO EARN 4-YEAR DEGREES IN 1973

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics*, 1970.

Table 12.—Revenue receipts for public elementary and secondary schools, by source: United States, selected years, 1919–20 to 1969–70

School year	Total	Federal Government	State governments	Local sources [1]
	AMOUNTS (in thousands of dollars)			
1919–20	$970,120	$2,475	$160,085	$807,561
1929–30	2,088,557	7,334	353,670	1,727,553
1939–40	2,260,527	39,810	684,354	1,536,363
1949–50	5,437,044	155,848	2,165,689	3,115,507
1959–60	14,746,618	651,639	5,768,047	8,326,932
1967–68	31,903,064	2,806,469	12,275,536	16,821,063
1969–70 [2]	38,700,000	2,800,000	15,500,000	20,400,000
	PERCENTAGE DISTRIBUTION			
1919–20	100.0	0.3	16.5	83.2
1929–30	100.0	0.4	16.9	82.7
1939–40	100.0	1.8	30.3	68.0
1949–50	100.0	2.9	39.8	57.3
1959–60	100.0	4.4	39.1	56.5
1967–68	100.0	8.8	38.5	52.7
1969–70 [2]	100.0	7.2	40.1	52.7

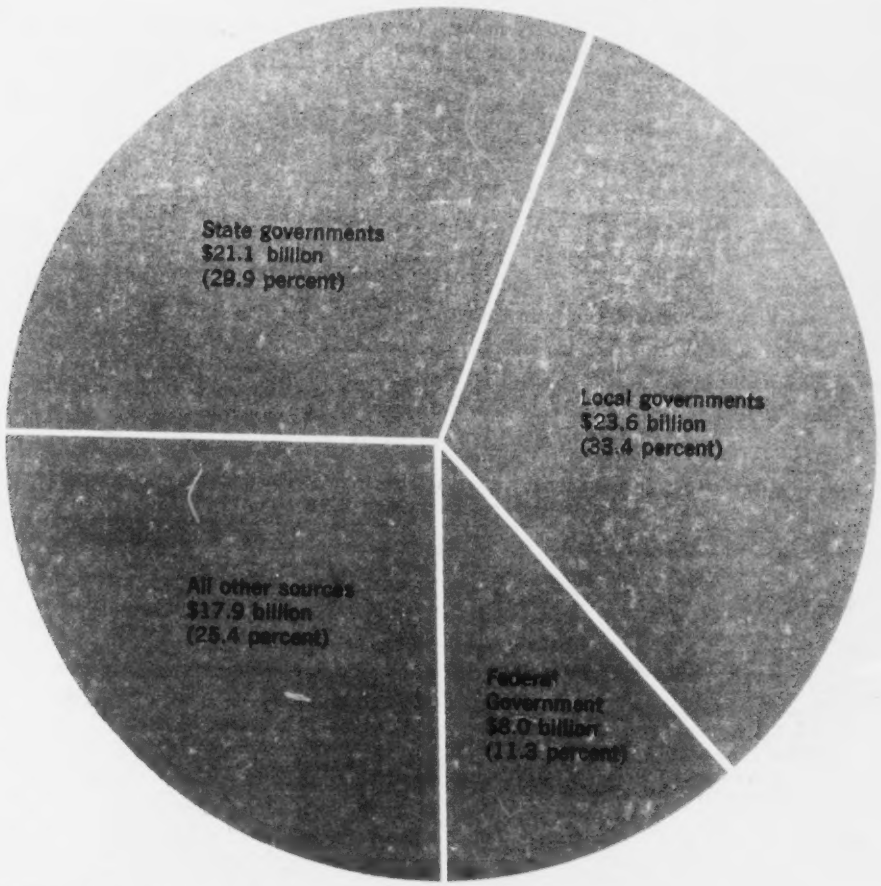
[1] Includes a relatively small amount from nongovernmental sources (gifts and tuition and transportation fees from patrons), which accounted for 0.4 percent of total revenue receipts in 1967-68.
[2] Estimated.
Note.—Beginning in 1959-60, includes Alaska and Hawaii. Because of rounding, detail may not add to totals.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970*, and estimates of the National Center for Educational Statistics.

Table 13.—Federal funds for education and related programs: Estimated outlays for fiscal years 1969 and 1970
(in thousands of dollars)

Type of support	1969	1970	Percent of change, 1969 to 1970
1	2	3	4
Federal funds supporting education in educational institutions grants and loans	$8,028,508	$9,273,124	15.5
Grants, total	7,496,281	8,634,745	15.2
Elementary-secondary education	2,838,439	2,964,315	4.4
Higher education	3,369,489	4,029,327	19.6
Vocational-technical and continuing education (not classifiable by level)	1,288,353	1,641,103	27.4
Loans, total (higher education)	532,227	638,379	19.9
Other Federal funds for education and related activities			
Applied research and development	1,188,349	1,253,083	5.4
School lunch and milk programs	597,700	651,100	8.9
Training of Federal personnel	639,853	687,250	7.4
Library services	186,124	190,757	2.5
International education	278,135	268,155	−3.6
Other	355,602	433,432	21.9

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970.*

Figure 5.—ESTIMATED EXPENDITURES OF EDUCATIONAL INSTITUTIONS, BY SOURCE OF FUNDS: UNITED STATES, 1969–70



NOTE:—Includes expenditures of public and private institutions at all levels of education from kindergarten through the graduate school.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Projections of Educational Statistics to 1979–80.*

Table 14.—Total and per-pupil expenditures for public elementary and secondary education: United States, 1919–20 to 1969–70

School year	Total	Total expenditure per pupil in average daily attendance	School year	Total	Total expenditure per pupil in average daily attendance
1919–20	$1,036,151,000	$64	1957–58	$13,569,163,000	$449
1929–30	2,316,790,000	108	1959–60	15,613,255,000	472
1939–40	2,344,049,000	106	1961–62	18,373,339,000	519
1949–50	5,837,643,000	259	1963–64	21,324,993,000	559
1951–52	7,344,237,000	313	1965–66	26,195,500,000	653
1953–54	9,092,449,000	351	1967–68	32,977,182,000	786
1955–56	10,955,047,000	388	1969–70[1]	40,561,997,000	926

[1] Estimated.
Note.—Beginning in 1959-60, includes Alaska and Hawaii.
SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, and Statistics of Public Schools, Fall 1969.*

Table 15.—Gross national product related to total expenditures [1] for education: United States, selected years, 1929–30 to 1969–70

Calendar year	Gross national product (in millions)	School year	Expenditures for education	
			Total (in thousands)	As a percent of gross national product
1929	$103,095	1929–30	$3,233,601	3.1
1939	90,494	1939–40	3,199,593	3.5
1949	256,484	1949–50	8,795,635	3.4
1959	483,650	1959–60	24,722,464	5.1
1961	520,109	1961–62	29,366,305	5.6
1963	590,503	1963–64	36,010,210	6.1
1965	684,884	1965–66	45,397,713	6.6
1967	793,927	1967–68	57,477,243	7.2
1969	931,403	1969–70	[2] 70,600,000	7.6

[1] Includes expenditures of public and nonpublic schools at all levels of education (elementary, secondary, and higher education).
[2] Estimated.
Note.—Beginning with 1959-60 school year, includes Alaska and Hawaii.
SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1970*, and estimates of the National Center for Educational Statistics.

57

International Education

Activities in the United States in the field of international education are designed to strengthen American education at all levels. Opportunities for support are available to students of modern foreign languages and world affairs and to teachers and students who either come from abroad to the United States or Americans who go abroad for research, study, or teaching. Federal Government programs represent only a fraction of the activities in the international education field.

The Office of Education's Institute of International Studies administers programs for education in modern foreign languages and world affairs under title VI of the National Defense Education Act (NDEA), the Mutual Educational and Cultural Exchange Act of 1961 (Fulbright-Hays), and the Agricultural Trade Development and Assistance Act (Public Law 83–480).

Under title VI of NDEA, the Institute provides support for language and area studies centers at American colleges and universities, modern foreign language fellowships for graduate and undergraduate students, and foreign language and area studies research projects. The 107 NDEA language and area centers offer advanced training in over 100 foreign languages and world area studies, with an emphasis on interdisciplinary and multidisciplinary courses. Summer intensive language programs provide students with opportunities to accelerate language training and to study languages not available on their home campuses during the academic year. Research projects are directed toward improvement of foreign language and area studies instruction at U.S. schools and colleges. All of these programs primarily focus on the non-Western world.

The Fulbright-Hays Act, in conjunction with Public Law 83–480, authorizes activities abroad in the field of international education. Group project grants are provided to State departments of education, colleges, universities, consortia, and nonprofit educational organizations for research, training, and curriculum development abroad in the field of foreign languages and world affairs. Other Institute programs provide fellowships for faculty research and for graduate students engaged in research on doctoral dissertations. Grants are also awarded to U.S. school systems and colleges to secure the services of educators from abroad to assist in curriculum materials development.

During 1969–70, the Office of Education spent $16 million for centers, fellowships, research, curriculum consultants, and overseas activities (table 16).

The Office of Education programs for American exchange teachers and educators from abroad, also administered by the Institute of International Studies, in 1969–70 provided supervision and financial assistance to 1,323 teachers (table 17). The Institute cooperated with the Department of State's Bureau of Educational and Cultural Affairs in conducting the Teacher Exchange and International Educational Development Program and with the Agency for International Development in administering the Technical Assistance Training Program in education.

Table 16.—Number and amount of Federal awards and programs in foreign languages and world affairs: United States, 1969–70

Federal program or award	Number	Amount
Total	—	$16,451,898
NDEA, title VI language and area centers, fellowships and research	2,370	12,997,965
Language and area centers program	128	5,185,000
Continuing language and area centers	107	4,684,468
Summer intensive language programs	20	465,000
Faculty development summer seminars	1	35,532
Language and area fellowships program	2,186	5,942,965
National defense foreign language graduate fellowships	1,810	5,589,206
Undergraduate summer program stipends	356	313,809
Faculty development awards	20	39,950
Language and area research program (NDEA, sec. 602)	56	1,870,000
Language and area research projects	56	1,870,000
Fulbright-Hays training grants for overseas language and area studies	255	2,283,752
Doctoral dissertation fellowships	127	782,550
Faculty research fellowships	69	498,380
Group projects abroad	30*	664,007
Foreign curriculum consultants	29	300,815
Professional services	0	38,000
Special foreign currency program (P.L. 83–480)	54	1,170,181
Institutional development grants for training, research, and study	52	1,152,621
Research in foreign education	2	17,560

* 622 participants.

Table 17.—Number of participants in international education programs administered by the U.S. Office of Education: 1959–60, 1964–65, and 1969–70

Program	1959–60	1964–65	1969–70
Educational development (foreign educators)	528	646	271
U.S. teachers to foreign countries to teach	283	239	136
Foreign teachers to United States to teach	181	193	182
Seminars for U.S. teachers and administrators abroad	155	371	80
Technical assistance in education for foreign participants	893	804	654

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, Institute of International Studies.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1971 O—437-761

U.S. DEPARTMENT of HEALTH,
EDUCATION, and WELFARE

Office of Education

OE 10005-70A

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF HEALTH,
EDUCATION, AND WELFARE

U.S.MAIL